ADMINISTRATIVE EXPERIENCE

RECORDED IN

FORMER FAMINES.

EXTRACTS FROM OFFICIAL PAPERS

CONTAINING

INSTRUCTIONS FOR DEALING WITH FAMINE,

COMPILED UNDER ORDERS OF THE

GOVERNMENT OF BENGAL,

BY

J C GEDDES, C. S.

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"IT MIGHT PERHAPS BE EXPECTED THAT WE SHOULD FRAME A SET OF RULES BY WHICH THE INDICATIONS OF FAMINE MAY BE MEASURED, AND RELIEF, WHEN FAMINE ARRIVES, MAY BE UNDERTAKEN. WE BELIEVE THIS TO BE WHOLLY IMPOSSIBLE. *The subject is in some respects not a very wide one, that is to say, many of the same features seem constantly to recur in all famines. Human nature is to a great degree the same in all countries with which we have any intimate acquaintance or respecting which we have means of information; and the same conditions constantly give rise to exactly the same questions and to similar phenomena whether in Bengal, in Madras, or in Ireland. But, if we may so express it, the same circumstances are differently combined on every separate occasion, just as a few pieces of glass in a kaleidoscope, although in themselves always the same, are combined in an infinite variety of grouping with every shake of the instrument.* EVERYTHING SO MUCH DEPENDS ON THE PARTICULAR CONDITIONS OF THE OCCASION, THAT ANY STANDARD THAT WE COULD FRAME WOULD PROBABLY MISLEAD, AND MIGHT INDUCE OFFICERS TO SUBSTITUTE A TOO MECHANICAL OBEDIENCE TO RULE FOR THAT INTELLIGENT APPREHENSION OF THE SUBJECT WHICH WE BELIEVE TO BE NOT DIFFICULT. *For we repeat that the elements of famine are much the same everywhere.* IT IS ENTIRE IGNORANCE OF THE WHOLE SUBJECT WHICH PRODUCES DISASTER. *We would recommend that the most essential parts of the reports on great famines, both in India, in Ireland, and elsewhere, should be collected and circulated in an easily accessible form, and that reliance should be placed on intelligent officers, to whom the gravity of the subject will now, we trust, be apparent, to acquire that knowledge which will enable them to work out in practice results far more satisfactory than could be obtained from any rules or models of conduct.*"—(ORISSA ENQUIRY COMMISSIONERS' REPORT, PART III, PARA. 77.)

TABLE OF CONTENTS.

I.—STANDING RULES AND GENERAL POLICY FOR TIMES OF FAMINE.

Measures approved by the Government of India (1868, cited 1873) for times of Famine.

	PAGE.
Information on rain-fall, crops, prices, and grain traffic	3
Traders on no account to be interfered with	,,
Importations of grain by Government—	
Authority to buy	4
Mode of purchase	,,
Mode of disposal	,,
Charitable Relief—	
Labor tests as far as possible	4
Admission	5
Exclusion	,,
Relief-houses	,,
Food	,,
Cooking	,,
Scale of diet	,,
Clothing	,,
Employment, out-door, on Public Works (Relief Works)—	
Money wages	6
Food-supply to be ensured	,,
Customary rates of daily wages specified	,,
Wages, to buy subsistence only	,,
Daily payments	,,
Accommodation	,,
Conservancy	,,
Food purveyance if necessary	7
Tickets or tokens	,,
Fuel	,,
Ganging of laborers	,,
Supervision of money payments	,,
Task-work mostly impossible; other precautions against indiscriminateness of relief	,,
Inspection and general supervision	,,
Measurement of work, and classification of laborers	,,
Cash accounts	8
Charitable Relief (resumed)—	
Relief Committees	,,
Relief-houses how far to be distributed over a district	,,
Able-bodied recipients of relief to be drafted on to public works, ordinary or special	,,
Assistance in going to and coming from central Relief-houses. Light labor works for the infirm—	
Returns	9
Inspection and supervision	,,
Accounts	,,
Employment (resumed)—	
In Public Works Department ordinary rules to be observed as far as possible ...	9
Excess of cost over estimates, adjustment	,,
Entertainment of extra subordinate agency	,,
Distribution of ordinary supervising agency	,,
Selection of works	10

Temporary Emigration— PAGE.

General considerations— 11

Employment to be timely ... ... „

Three forms of relief distinguished:—

1*st.*—Entirely gratuitous without labor, or with only normal labor. (CHARITABLE RELIEF).

2*nd.*—Partially gratuitous, with some substantial labor. (SPECIAL RELIEF WORKS).

3*rd.*—In no way gratuitous, full labor. (ORDINARY PUBLIC WORKS).

Communications—

Responsibility— 12

Accounts— ... ... „

The remission or suspension of land-tax—considerations thereon— 13

Principles prescribed in 1868 and cited in 1873.

Forcible reduction of the price of private-owned food-grain on no account to be attempted 14

Exceptional circumstances under which alone Government will import grain ... 15

Example: North-Western Provinces, 1860-61 ... ... „

Markets to be watched 16

Capacities of private trade in England and in India respectively ... ... „

Price-currents ... ... „

Relief—The able-bodied and the weak-bodied labor tests... 17

Mr. John Strachey and Mr. John Stuart Mill on labor tests ... ... „

Danger of indiscriminate relief ... ... „

Poor-houses for in-door labor ... ... „

Migration from distressed districts 19

Relief works 20

Localities to be chosen for relief works 21

Economy and efficiency of work not to be unduly sacrificed ... ... „

Distribution of Public Works Department establishments ... ... „

Railway Companies' works 22

Railway Companies' officials ... ... „

Sanction and audit generally ... ... „

Discretion to local Governments and Administrations 23

General Policy.—Course pursued in North-Western Provinces, 1869.

Extent of the State's responsibility for human life. Limitations 24

Relief works. Province and responsibility of civil officers and Public Works Department officers, respectively 25

Specific rates adopted in the three several modes of relief: (1) full labor, (2) light labor, (3) gratuitous ... ... „

Efforts to stimulate grain trade, (1) by importations, (2) by reduction of transit charges 26

Importation of grain into Ajmere and Jhansie by Government ... ... „

Reduction of railway rates and exemption from tolls in case of grain. Results... „

Tuccavee advances, (1) ordinary and (2) extraordinary. For (1) plough-cattle and (2) seed-corn. Results 27

Resumé of measures in North-Western Provinces, 1869 ... ... „

Orissa, 1867.—The Government and the Central [Calcutta] Relief Committee. Their respective provinces. Mode of administration 28

II.—STANDING RULES FOR CIVIL ENGINEERS, &c., IN CHARGE OF RELIEF WORKS.

Public Works Department Code. Chapter XIIIA 33-42

General rules—

[See above under *employment* in Standing Rules and General Policy] ... 33-39

Sanitary— 39

Rules to be framed by local Government ... ... „

Four requisites to be considered: (1) houses, (2) food, (3) water, and (4) conservancy ... ... „

Houses. Their site, mode of construction, superficial area ... ... „

PAGE.
Food. Water. Conservancy 40
Native doctors. Precautions against epidemics, small-pox, cholera, contagious fever 41
Superior medical supervision ... ... „
Responsibility 42
Outlay on sanitary arrangements ... ... „

III.—RELIEF WORKS GENERALLY, AND ESPECIALLY FOR ABLE-BODIED LABORERS.

FULL LABOR GANGS, mostly under Engineer Officers.

Contracts *en masse versus* individual payments.

Arguments in favour of the contract system considered 45
(1.) That supervising agency is too limited ... ... „
(2.) That any other system is costly and wasteful ... ... „
(3.) That the able-bodied are more valuable and ought to be most cared for 46
Answer:—That the object of Government is to save life and prevent demoralisation.
Should the relief employment be out-door or in-door? Considerations and actual experience 47
Arrangements carried out in the North-Western Provinces, 1869 48
Checks on pauperism maintained at three points: *first*, the poor-houses (or relief centres) with charitable relief; *second*, the light labor works with partially charitable relief; *third*, the full labor works without charitable relief ... ... „
Expense inevitable but lives saved ... ... „
Wages at Ajmere varied according to varying price of grain 49
Payments in grain more useful for testing than for relieving distress 50

Wages in Grain.

Rules prescribed for sales of rice to laborers employed by Department Public Works in Orissa, 1867 ... ... „
Table showing even quantities of rice, and even sums of wage without fractions ... 51

The system of daily wage in North-Western Provinces, 1861, described by Colonel Baird Smith.

Relief works of 1861 in North-Western Provinces 52
Distinction between labor relief, and charity relief ... ... „
Subsistence wages ... ... „
Piece-work or task-work precluded by the circumstances ... ... „
Time-work.—Rates allowed.—Payments in cash rather than in grain 53
Organisation.—Numbers employed ... ... „
Agriculture and other industries in no wise crippled 54
Success of the works. Costliness of the works ... ... „
Three separate sets of operations. (1) Regular works of Department Public Works paid on contract terms as usual. (2) Special relief works on daily wage system. (3) Charitable relief at poor-houses ... ... „

The system of contracts with subsidies to contractors according to the number of feeble laborers actually employed by them (described by Colonel Brooke, Rajpootana, 1869).

Ambiguity of term able-bodied, and other considerations 55

Selected examples of relief works chiefly carried on by Department Public Works, with laborers both able-bodied and feeble. System practised, rates of payment, relief results, outturn of work, &c.

North-Western Provinces, 1869.
Eastern Ganges canal 56
Moradabad and Tigree road 59
Banda works 62
North-Western Provinces, 1861, Colonel Baird Smith on the Mohun Pass Works ... 81a

Madras, 1854. PAGE.

Bellary 63
Civil officers' rules and practice 72
Engineer officers' rules and practice 73

Cawnpore, 1837.

Example where pecuniary means happened to be much limited 78
Payment in grain with tickets ... ... ,,
Mr. Girdlestone on the occasions for, and limits to, special relief works for the able-bodied. When can they be safely closed? 80

IV.—RELIEF WORKS EXCLUSIVELY FOR INFIRM LABORERS.

LIGHT LABOR GANGS, mostly under Civil [Relief] Officers. [Orissa, 1866.—Enquiry Commissioners.]—

1. Contract system wherein inapplicable at times of positive famine 85
2. Necessity of separating the works for the able-bodied from those for the infirm. Not much danger of crippling agriculture... ... ... ,,
3. No single set of rules universally applicable. Discretion as well as rules ... 86
4. The dilemma of relief works. How to relieve seasonably yet without disturbing private industry, and effectually yet without demoralising the laborers ... ,,
5. Task-work unsuitable. Examination of the Ooryahs' alleged repugnance to labor 87

[Orissa, 1867.—Mr. Hobhouse.]—

6. Description of the system of light labor gangs *(Easy task-work)* 88

[Cuttack, 1867—Mr. Kirkwood.]—

7. Details of this system 90
Remuneration. Establishment ... ... ,,
Success of the system ... ... ,,
8. Distinction between (1) the full labor gangs under the Public Works Department, and (2) the light labor gangs under the Relief Manager ... ... ,,
9. Accommodation 91
10. Mr. Kirkwood on the principles of payment ... ... ,,
11. Principles in Cuttack, 1867 ... ... ,,
12. **Cheering influence of the labor relief contrasted with the extreme depression of gratuitous relief without labor** ... 92
13. Task-work preferable to daily wages ... ... ,,
14. Specific rates in Cuttack, 1867 93
15. Comparison with Public Works Department rates ... ... ,,
16. Influence on the health and morale of the laborers ... ... ,,
17. Summary 94
18. Who are to be admitted to this relief ... ... ,,
19. Women, even though physically able for a full labor, should not be excluded from a light labor gang ... ... ,,

RULES AND ACCOUNTS FOR LIGHT LABOR GANGS.

20. Mr. Kirkwood's programme 94-98
Mr. Kirkwood's explanatory notes on the above rules 98-102

[Balasore, 1867.—Mr. Rampini.]—

21. Payment at first by daily wages, afterwards by task-work. Success of the system 102

[Rajpootana, 1869.—Colonel Brooke.]—

22. **System of contracts with subsidies to the contractors according to the percentage of infirm laborers employed by them on the works** 103-105

Amritsar, 1869.—Mr. Coldstream.]—

23. Daily wages system. Rates and outturn 105

[Salem and North Arcot, 1866.—Mr. Ellis.]—

24. Daily wages system. Task-work deprecated. 107

[Jhansi, 1869.]— PAGE.

25. System of daily wages and tickets 100
Orderly management with so many as 23,000 laborers 109
26. Mr. J. Inglis on the above ... ... ,,

[Ajmere, 1869.]—

27. System of daily wages and tickets. Captain Repton's arrangements ... 119

[Bijnour, 1869.]—

28. Daily wages system. Mr. H. Ross' arrangements 110
29. Rates and outturn 111

V.—SUBSIDISED IN-DOOR EMPLOYMENTS.

ESPECIALLY SPINNING AND WEAVING.

1. Mr. Molony on the general principle. Objection about trade interference refuted 115
2. Mr. John Strachey on the system at Moradabad, 1860-61 ... ... ,,
Difficulty of relieving distressed women who are precluded from appearing in public ... ... ,,
3. Arrangements made by Mr. Strachey 116
4. Mr. Hobhouse on the spinning and the weaving relief in Orissa, 1867 ... 117-119
5. The arrangements in Pooree, 1867. (Mr. Toynbee) 119
6. The arrangements in Cuttack, 1867. (Mr. Kirkwood) 120
7. RULES, ACCOUNTS, and STATEMENTS, &c., recommended by Mr. Kirkwood 122-126

Miscellaneous Relief Measures in Orissa, 1867. Agricultural settlements of paupers, grants for village improvements, &c. 127

VI.—CENTRALISED RELIEF.

i. e., RELIEF AT CENTRALISED POOR-HOUSES.

1—11. Mr. John Strachey's system at Moradabad, 1861.

1. Principles to be followed 131
2. Poor-house and work-house combined 132
3. One poor-house at sudder station found sufficient. Arrangements in the district for sending in distressed people to the sudder station 132-133
4. Unwillingness to resort to poor-houses surmounted 133
5. Plan of poor-house. Interior 134
6. Checks on admission; registers, tickets, &c. Residence not insisted on ... 134-235
7. Accommodation 135
8. Cooking, for Hindus by Brahmins, &c., and for Musalmans, &c., by Musalmans, the latter by contract. Scale of diet 136
9. Arrangements for distributing the food ... ... ,,
10. Employment provided—kind of work—outturn 137
11. Statistics of relief and expenditure 138

12—15. Colonel Baird Smith on the Poor-houses, N.-W. P., 1861.

12. Distinction between those fit and those unfit for out-door labor. The latter a case for private charity with equal contributions from Government ... 130
13. Relief with cooked food recommended; distribution of grain deprecated ... 139
14. Food distribution supervised by the committee member on duty 140
15 Six principles urged by Colonel Baird Smith: (1) Cooked food. (2) Continuous relief (apart from casual relief) preceded by enquiry. (3) *Some* work required. (4) Clothing and medicine as well as food. (5) Out-door [home] relief for certain exceptional classes. (6) Poor-houses not to be established except where continuous supervision is already available 140-141

16—18. The Orissa Enquiry Commissioners on the experience of 1866 in Orissa.

16. Three difficulties:—1st. During the crisis extreme emaciation the only feasible test of admission. 2nd. The demoralising. 3rd. Caste scruples. These last exaggerated, as is proved by the fact of the greatest mortality having occurred among the classes most devoid of caste feeling 141-142

		PAGE.
17.	Centralised relief *versus* home relief, or in-door relief *versus* out-door relief. Considerations.	142–143
18.	Scale and quality of diet	,,
19-32.	*Orissa*, 1867, *(Mr. Hobhouse, Committee President.)*—	
19.	On the substitution of other forms of relief instead of the centres during 1867. Objections to centralised relief.—Statistics, Orissa, 1867	144–146
20.	*Mr. Kirkwood* on the same subject, Cuttack	,,
21.	Considerations for and against centralised relief	147
22.	But if centralised relief is unavoidable, then relief camps with a cluster of huts are to be preferred to single sheds as less demoralising	
23.	Locality and site recommended for a relief camp. South bank of a river advantageous, &c.	148
24.	Ferry tolls to be abolished, and ferries near relief centres to be worked free ...	149
25.	Out-houses and hospital shed	150
26.	Scale of diet	,,
27.	(Objections to relief with cooked food recapitulated)	151
28.	Estimate of cost with size of one of the huts for a relief camp	152
29.	Management, employment	,,
30.	RULES FOR THE MANAGEMENT OF RELIEF CENTRES with notes, by Mr. Kirkwood	152–154
31.	Mr. Kirkwood's FORMS OF RELIEF CENTRE ACCOUNTS AND RETURNS	154–156
32.	Distribution of grain *(uncooked food)* at central localities. Precautions ...	156
33.	*Mr. Gordon Forbes* on the system at *Ganjam*, 1866. Admission, cooking, distribution, cost	,,
34.	System at Shevagunga zemindary in *Madura*, 1866. Cooked food, admission by ticket	158
35.	System in *Madras town*, 1866. Cooked food, also money payments by ticket ...	159
36.	System at *Salem* and *North Arcot*, 1866. Cooked food. Casual relief. In certain cases money and uncooked food	160
37.	*Hissar*, 1869. Difficulty of maintaining order	161
38.	*Allahabad*, 1869. Occasional difficulty from excessive timidity in accepting relief	162
39.	*Ajmere*, 1869. Scale of diet	163
40.	N.-W. P., 1869. Mr. Henvey on the system of centralised relief, with occasionally home relief also, throughout the N.-W. P., 1869. Gratuitous relief confined to the helpless, and residence at the poor-house enforced from these ...	,,
41.	Relief of special classes, decayed persons of respectability and travellers. Statistics...	163–165
42.	RULES AND ACCOUNTS prescribed by the Central Committee for observance throughout the N.-W. P. both in 1860-61 and 1868-69	165–167
43.	Further rules at *Jhansie*, 1869. In-door employments. Rates allowed. Statistics. Rules cited. Registers kept. Results	167-171
44.	System at *Agra*, 1868-69	,,
45.	Combination of centralised and home relief at Bijnour, 1869. Statistics ...	172
46.	RECOVERY OF CASTE after partaking of cooked-food at a poor-house. Decisions of Cuttack and Calcutta pundits.—Manu and other *rishis* cited ...	173–177
47.	MADRAS, 1824. Cooking arrangements, &c.	177a

VII.—MEDICAL ARRANGEMENTS.

1.	At Moradabad (1861) by Mr. Strachey	181
2.	At Ganjam, 1866, summarised by Lord Napier	,,
3.	Experience in Cuttack, 1867	182
	Detailed arrangements; size and arrangements of building; conservancy establishment; medical staff, supervising and subordinate	182–184

VIII.—DISEASE DURING FAMINE.

1.	Experience in North-Western Provinces, 1860-61	187
	Prominence given by Colonel Baird Smith citing Dr. Cutcliffe to the mental depression during famine as well as to the actual under-feeding among the factors of disease. [Erroneous view on this subject put forward by the leading exponent of the under-feeding theory about the causation of epidemic fever]	187–188
2.	Experience in Orissa, 1866. (Enquiry Commissioners.) Cholera prominent. *Fever comparatively little heard of*	189
3.	Experience in Cuttack district, 1866. (Enquiry Commissioners citing Dr. N. Jackson, intestinal disorders)	190

PAGE

4 Experience in Pooree, 1866 (Mr Raban) Small pox, &c 190-191
5 Experience in Cuttack, 1867 (Mr Kirkwood) 192
6 Experience in Bareilly, 1869 (Dr. Corbyn.) Lunacy, ulceration of the cornea, loin-palsy from the pulse *khesari dál*
7 Epidemic fever in Rajpootana, 1869 Dr Lyons on the under-feeding theory about its origin. Dr Moore on the malaria theory about its origin The facts set forth by Colonel Brooke .. 193
8 Epidemic fever in the Central Provinces, 1869 *The etiologic problem of epidemic fever formulated by Mr Morris, Chief Commissioner.* Prerequisites for its solution 197

IX.—VILLAGE OR HOME RELIEF.

1 *Colonel Baird Smith* on the necessity of other than centralised relief for decayed families of Rajput and other upper classes .. . 201
2 *Mr Hobhouse* on the system followed in Orissa, 1867 [See also under Centralised Relief] .. ... ,,
3 *Mr Toynbee's* description of the procedure in *Pooree*, 1867 .. 203
4 *Mr Kirkwood* on the procedure in *Cuttack*, 1867. RULES, FORMS OF ACCOUNTS, RETURNS, &c 204-208
5 Summary of the distributions of grain (uncooked-food) in *Orissa*, 1867 ,,
6 System in *Agra*, 1861 .. ... ,,
7 (See also under "spinning relief," Moradabad, &c.) ... . . ,,

X.—PROVISION FOR WIDOWS AND ORPHANS.

[North-Western Provinces, 1861]—

1. Colonel Baird Smith's proposal to constitute an orphan fund with an assignment from the Relief Committees 211

[Moradabad, 1861—Mr Strachey]—

2 Orphans made over to respectable persons of same faith ... ... ,,

[Orissa, 1866.]—

3. Recommendations of Enquiry Commissioners. Widows and orphans a charge to private charity rather than to the State 212-213

[Orissa and Chota Nagpore, 1867.]—

4 Provision made. Recommendations by Mr. Hobhouse, Committee President, and various considerations. Measures finally adopted. Rates sanctioned. Adjustment 213-217
5 Table of annual liabilities 218
6 Discussion as to the bringing up of the Chota Nagpore orphans, whether as fetishists (Sonthals), polytheists (Hindus), or monotheists (Christians or Musalmans) Recommendations by Babu Issur Chunder Ghosal and Babu Rakhal Dass Haldar (both deprecating the recognition of fetishism, and partially so of Hindu caste), by Captain Money (reviews the various considerations and difficulties), by Colonel Dalton and Mr Hobhouse (would communicate with Hindu and Musalman society about orphans of Hindus and Musalmans respectively, and meanwhile would make over fetishist children for whom no other guardians were procurable to a Missionary orphanage). Sanction by Government to this last view 219-225

XI.—MIGRATION FROM DISTRESSED TO OTHER DISTRICTS.

[Moradabad, 1860-61, Mr. Strachey]

1 Benefit from this spontaneous form of relief in such a district as Moradabad with bad roads impeding carriage 229-230

[North-Western Provinces, 1860-61—Colonel Baird Smith]

2 Immigration according to cheapness of food, chance of employment, also connection by caste, &c Influence for most part beneficial. These movements bringing new labor to tillage help to explain the abundance of the harvest immediately after a dearth . 230-231
Estimate of the emigration from Muttra 10½ per cent, Meerut 3 per cent, Allyghur 5 per cent, in all probably 253,000 souls Famine rather of employment than of food 231-232

PAGE.

[Ganjam, 1866—Mr. Gordon Forbes.]

3. Migration inland and emigration to Mauritius... 234

[Rajpootana, 1869.]

4. Wholesale exodus. Narratives of suffering 235-240

XII.—PRICES OF FOOD-GRAIN DURING SCARCITIES.

[Orissa Enquiry Commissioners.]—

1. How far do prices really gauge the situation? 243
2. Discrepancies in quotations, Orissa, 1866 244
3. During great dearth prices often really nominal ... ... „
4. At such times price quotations are an imperfect criterion ... ... „
5. Course of prices in Orissa, October 1865 to December 1866 244-245
6. (*Mr. Henvey*). Experience in North-Western Provinces, 1869, on these points. Course of prices and demand for relief contrasted. Suddenness and fluctuation of the resort to relief works and poor-houses... 247-249

7. During scarcities the prices of the inferior food-stuffs rise much higher in proportion than those of the superior kinds do 250-251

Comparative table, North-Western Provinces, 1832 to 1869. Considerations on the above regarding the experience of 1869 in North-Western Provinces. Food dearer, yet suffering less than in any former famine, owing to improvement in the condition of the population, and to more efficient relief measures by the Government ... ...

8. Price-currents:—
   Behar and Bhaugulpore, 1862 to 1866 253
   „ „ 1865-66 (abstract) 254-255
   „ „ „ (detail) ... ... „ „
   Bengal generally, 1865-66 258

XIII.—IMPORTATION OF FOOD-GRAIN BY GOVERNMENT.

1. Mr. Girdlestone on the impossibility for the Government to import and purvey, or even to buy food enough for a famine of any considerable extent. Also on keeping up communications. Excessive migration deprecated 261-263
2. Colonel Baird Smith on the prodigious exertions of private enterprise in N.-W.P., 1860-61 263
3. The Orissa Enquiry Commissioners on the same 264
4. *Sales.*—Differential sales, according to supposed degree of personal indigence, deprecated by the Orissa Enquiry Commissioners 264
5. Rules and accounts prescribed for the Government grain business in Orissa, 1866 265-270
6. Importation operations, Orissa, 1867, reviewed by Mr. Hobhouse 27
7. Mr. Schalch's Rules and Accounts for the Government grain business in Orissa, 1867 272-280
8. Stock and cash forms in Orissa, 1867 278-280
9. Narrative of farther transport and sale operations carried on by the Relief Department in Orissa, 1867. Statistics of the results 283
10. Narrative of the importation from Agra to Ajmere, 1869, by Government and by private charitable grain associations. Rules of the latter 284-290
11. Employment of camels for import and transport on the Rajpootana famine ... 290
12. Import operations in Tonk (Rajpootana), 1869 291-292

XIV.—THE PRINCIPAL STATISTICS OF FORMER FAMINES.

1. [The Famine of 1770, see below Sir George Campbell's Memoir, page 408] ...
2. [The Famine of 1837, approximate statistics, see page 385, Colonel Baird Smith's contrast between 1837-38 and 1860-61] ... ...

3-6—The North-Western Provinces Famine of 1860-61.

3. Colonel Baird Smith's summarised statistics of distress, emigration, relief, expenditure, loss, and remission of revenue 295
4. Mr. Girdlestone on the extent of mortality ... ... „

PAGE.

5. Mr. Girdlestone on the financial effects, with observations on Colonel Baird Smith's statistics 296–298
   (a) Total cost to Government on special relief works 296–298
   (b) Total loss to Government by remissions of land revenue 296–298
   (c) Condition of the excise revenue 296–298
   (d) *Loss and expenditure of all sorts recapitulated* 298
6. Mr. Girdlestone's statistics of the increase of crime, and observations on the greater order and peaceableness in 1860-61 as compared with 1837-38 ... 299–300

7-15. The famine of 1866 in Bengal, Behar, and Orissa, also in Northern Madras—

Behar and Bhaugulpore Divisions—

7. Mr. Cockerell's summarised statistics of famine affairs, area of distress, population affected, mortality, relief, relief expenditure 301–302

Orissa—

8. Mortality, summary and table 302–303
9. FINANCIAL EFFECT OF THE 1866 FAMINE IN ORISSA, BEHAR, AND BENGAL 304-305
10. Heads of Orissa expenditure on importation—
   (a) Expenditure of 1866 on both relief and importation 305
   (b) Expenditure of 1867 on importation only 306
   (c) Stock accounts showing disposal of rice in 1866 and in 1867 ... 307
11. Heads of Orissa expenditure on relief 307
   (a) In 1866, see above 10 (a). In 1867 and 1868, relief expenditure charged off in Calcutta: table with Mr. Hobhouse's narrative of same. Relief expenditure charged off in Orissa: Mr. Molony's narrative and form tables 308–313
   Comparative cost of the different modes of relief,—Orissa, 1867 313
11A. Other statistics, of persons relieved, employment given, &c. 313A

[12—15. MADRAS PRESIDENCY, 1866.]

12. Mr. Dalyell's statistics: (1) enumeration of infirm persons relieved; (2,) statement of funds provided and expenditure incurred on relief; (3) enumeration of able-bodied persons employed and expenditure incurred 314-316
13. Mr. Dalyell on the mortality in the Madras Presidency. Mortality by famine confined to Ganjam 317
14. Mr. Gordon Forbes on the mortality in Ganjam, with table; also on the increase of crime in Ganjam 317-319
15. Bengal and Madras Presidencies generally. Statistics, actual and approximate... 319-321

[16—19. N. W. PROVINCES, 1868-69-70.]

16. Mr. Henvey on the mortality. Difficulty in obtaining reliable statistics. Mortality returns for 1868 and for 1869. Increase of 200,000 shown in the latter, which may be set down to the Famine 321–323
17. Famine Finance of the N. W. Provinces, 1868-69-70 323–346
   (a.) Labour Relief. Share of the Government and Local Funds 323
   (b.) Charitable Relief 325
   Transactions of the Central Committee 325
   (c.) Remissions and suspensions of land revenue 327
   (d.) Tuccavee advances for works of permanent utility, also for plough-bullocks and seed-corn 329
   (e.) THE ENTIRE FAMINE FINANCE SUMMARISED 331
18. Considerations as to the adjustment of some of these charges 332
19. Mr. Henvey on the increase of crime; 1869 contrasted favourably with 1861, as 1861 with 1837 333

[PUNJAB, 1868-69-70.]

20. Mr. Lepel Griffin's tabular statements of the numbers employed or relieved, the expenditure incurred, and the ways and means provided 334–338

[RAJPUTANA, 1868-69-70.]

21. General Statistics summarised by Mr. Under-Secretary Girdlestone 338
22. Financial Statistics detailed by Colonel Brooke 339

[CENTRAL PROVINCES, 1868-69.]

23. Financial Statistics summarised by Mr. Morris, (see also p. 406) 340
24. On remission of land revenue as a measure of relief. Considerations for and against. Notes by Mr. Girdlestone citing Mr. Rose (Cawnpore), and Mr. William Muir (Calpee). Also by Mr. Henvey summarising experience in the North-Western Provinces, 1869... 341–346

XV.—COMPARATIVE PRESSURE ON THE DIFFERENT CLASSES OF SOCIETY AT THE SAME PERIOD.

PAGE.

[Mr. John Strachey,—Moradabad, 1860-61.]

1. Comparatively little pressure on the agricultural classes. Description of these ... 361
2. Chief pressure on wage labourers, artisans, especially skinners and weavers. Musalmans suffered more than the Hindus 361
Tabular view with enumeration of the several Hindu castes and Musalman classes registered in the Moradabad poor-house on two selected dates 362
3. Difference between the agriculturists' and non-agriculturists' condition during scarcity. Moradabad experience 363

[Colonel Baird Smith,—N. W. Provinces, 1860-61.]

5. (1.) Geographical features of the distressed tracts. (2.) Moral features of the populations therein—different races with their different characters, industrial or non-industrial. The military, the sacerdotal, the literate classes. The cultivating classes 364
6. Advantage of the talukdari (extensive estate) class in the strain of 1861. Their good conduct 364
7. Goojur tribes in Boolundshuhur. Their mulct of £15,000 for mutiny misconduct 364
8. Mr. Girdlestone on the comparative immunity of the industrious castes, North-Western Provinces, 1837 and 1861 365

[Mr Cockerell,—Behar, 1866.]

9. Rise in wages throughout Behar before 1866 not commensurate with the rise in prices 366
10. Labouring classes of Behar declared by Medical Officers to have been generally under-fed so early as 1860 366
11. Degrees of pressure on the several classes of society. (1) Substantial ryots (2) Ordinary ryots, rents paid in kind. (3) Hired labourers, wages paid in kind. (4) Artisans. (5) Ordinary paupers 367
12. Hired labourers and saltpetre manufacturers, Tirhoot and Chumparun ... 367-368

[The Orissa Inquiry Commissioners.]

13. Hooghly, 1866.—The wage-subsisting classes, and especially the weavers ... 368
14. Pressure in Orissa as in North-Western Provinces chiefly measured by the extent of or want interest in the soil... 370
15. Salt manufacturers (molunghis) 370

[CUTTACK, 1866.]

16. Babu Rungo Lall Banerjee on the comparative sufferings of the several classes, privileged and non-privileged cultivators, semi-Hinduised Sudras, daily wage labouring class, &c. Enumeration of a relief centre inmates; mostly non-residents come from a distance. Observations as to unpopularity of relief centres. Babu Chunder Sikar Banerjee on the extent of indebtedness among ryots and their relations with the mahajuns 371-374

[POOREE, 1866.]

17. Mr. Raban's similar enumeration of the several classes ... ...

[GANJAM, 1866.]

18. Lord Napier on the (1) ryots, (2) coolies, (3) vagrant class, (4) petty traders and mechanic class. Scrupulousness as to cow-killing examined and commended ... 376-377

[GANJAM, 1866.]

19. Mr. Gordon Forbes' similar enumeration 377

[CENTRAL PROVINCES, 1869.]

20. Mr. Morris on the various proprietary interests in land, their comparative endurance and usefulness during scarcity 378

[RAJPUTANA, 1869.]

21. Colonel Brooke on the condition of the cultivator class and the labourer class in British and Native territory, and their respective comportment under pressure... 379

[NORTH-WESTERN PROVINCES, 1869.]

22. Mr. Henvey on the comparative suffering or immunity of the several classes. Field labourers, artisans, weavers, dyers, skinners. Proportion of the several castes or classes found at an enumeration of 5,000 employés on a relief work in Bijnour. Similar enumerations recommended for the future 379-381

XVI.—COMPARATIVE PRESSURE ON THE SAME CLASSES OF SOCIETY AT DIFFERENT PERIODS.

PAGE.

[Colonel Baird Smith.]

1. Contrast between 1837 and 1861. The greater disorganisation in 1837 (military called forth); the intenser suffering in 1837 (mortality probably 800,000); the greater impoverishment in 1837. Improvements between 1837 and 1861: limitation of assessment, consequent rise of property; fiscal and judicial administration vastly improved; agricultural industry bettered; trade ampler and sounder 385–388

[Colonel Baird Smith.]

2. Decline of wages in 1860 and 1861 from their previous abnormal rise in 1858. Decay of weaving trade. Statistical and other comparison between the consumption of country-made and English-made cloth 389–391

[The Orissa Enquiry Commissioners]

3. The backward character of cereal agriculture in Lower Bengal; the intricacy and confusion of the intermediary interests in the soil; the extent and influence of sub-infeudation; the action of landlordism in Lower Bengal. Yet cultivation increased immensely during the last century. But *per contra* population increased. Probably vicissitudes of season fall more heavily now than formerly 392–393
4. The Orissa Enquiry Commissioners on certain social changes inducing a greater liability to famine. Social cohesion in some respects relaxed by social progress. Questionable if modern wage-receiving class can bear fluctuations of price as the old-fashioned dependent class did. Sources of voluntary relief lessening with the progressive severance of classes 394
5. Mr. Henvey on the increasing numbers depending on daily wages; density of population; scarcity is now-a-days rather of employment than of food ... 395
6. Mr. Henvey. Superior elasticity of North-Western Provinces population in 1869 as compared with 1861 396
7. Madras, 1866.—Mr. Dalyell. Increase in wealth throughout Madras Presidency from 1783 to 1865 deduced from a comparison of the progressive price of rice. Increase in wealth from 1855 to 1865 deduced; (1) from comparative prices; (2) from the numbers benefiting by the rise; (3) from the extent to which services are paid in grain; (4) the progress in the sea-borne imports; (5) the progress in the sea-borne exports; (6) the progress in the land revenue, the excise revenue, the salt revenue and salt consumption, the stamp revenue, (customs revenue different) 396 403
8. *Mr. Girdlestone* (May 1868), on the improbability of another general famine in the North-Western Provinces 403–405
9. *Central Provinces*, 1869—*Mr. Morris* on the question how far extensive exportation is beneficial to backward countries 405

[Mr. Morris on the incidence of pressure in 1869.]

Fiscal effects, 1868-69 406
Comparative effects of the earlier and the present fiscal systems 407
Charitable relief under former and under present administration. Acceptance of responsibility for life by the Government (1868) well received 408

[Estimates of the loss in cattles and other agricultural stock.]

1.—In N. W. P. 1861 (Colonel Baird Smith) 349–350
2.—In N. W. P. 1869 (Mr. Henvy) 350–351
3.—(*a*) In Rajputana 1869 (Colonel Brooke) 351–359
(*b*) Agricultural and pastoral wealth in Rajputana 351–352
(*c*) Computed loss in Marwar, 1868-69 353
(*d*) Ditto ditto, 1869-70 (Men yoking themselves to ploughs) ... 354
(*e*) Computed loss in Tonk, 1869. Hindus selling kine to Musalman butchers. Scarcity of fodder for cavalary at Deolee. Estimates for Tonk summarised by Captain Blair 356–359

XVII.—MEMOIR BY MR. GEORGE CAMPBELL ON THE FAMINES WHICH AFFECTED BENGAL IN THE LAST CENTURY.

PAGE.

1. The famine of 1770 (North Bengal) 408–422
2. The famine of 1783 (North-Western India) 422–426
3. The floods of 1787 (Eastern Bengal) 426–428
4. Conclusions.—The famines of 1770, 1783, 1866 compared.—The famines of last century less severe than is commonly supposed 428

Precariousness of rice as food-staple 428

Remedial measures 429–430

XVIII.—DESCRIPTIVE LIST OF RECORDS ON INDIAN FAMINES 431–437

XIX.—POPULATION AND AREA TABLES, FROM BENGAL CENSUS 1872 ... 439–441

STANDING RULES AND GENERAL POLICY FOR TIMES OF FAMINE.

Memorandum of MEASURES approved by the GOVERNMENT OF INDIA for adoption in time of FAMINE.

(PUBLISHED IN SEPTEMBER 1868 AND CITED IN NOVEMBER 1873)

From Gazette of India Supplement, 26th September 1868.

INFORMATION on rain-fall, crops, prices, grain traffic.

On the failure of the ordinary rain-fall either in the rubbee or khurreef seasons to such an extent as to render probable the loss of the crop, or such injury as will be followed by serious scarcity, it will become the duty of the local Government to cause frequent periodical reports to be made by all district officers, of the rain-fall, the state of the crops, and the prices of the descriptions of grain in common use.

2. These reports should extend to districts not affected by the drought as well as to those which have suffered.

3. Measures should at the same time be taken for obtaining as accurate returns as possible of the imports of grain by railway, road, or river into the part of the province affected. Such returns should be required only for the grain brought into the province from external markets, not for the internal movement of trade within the districts. Hence the enquiry would commonly be restricted to one or two lines near the frontier of the province.

4. Particular attention should be paid to the accuracy of the price-currents, as they have not unfrequently been shown to be untrustworthy.

5. These reports of prices and importations should be published at short intervals while the scarcity lasts, and measures may be taken in the larger towns for making their contents known to the grain merchants.

6. Attention should be given to the manner in which this information is obtained and made public, with the particular object of preventing panics or misapprehension.

TRADERS on no account to be interfered with.

7. Strict injunctions should be given to all local officers to abstain from any interference with the ordinary course of trade in the buying and selling of grain. Under no pretext whatever can any one be held to be justified in bringing

pressure to bear on the dealers, however serious may be the want of food, or however high may be prices demanded. These remarks should be held to apply to military cantonments and stations equally with civil stations, towns, and districts.

IMPORTATION BY GOVERNMENT.

8. The local Government alone can be regarded as having authority to direct measures to be taken for the importation of food into any district from a distance; and without special authority, the purchase of grain by public officers otherwise than for distribution to persons receiving relief, is prohibited.

9. So far as is practicable, the purchase of grain for the purpose above referred to should be made from local dealers; and imports by public officers from distant markets, even for the needful supply of works or relief houses in operation, should never take place unless they be especially sanctioned by the local Government. On this subject reference should further be made to Rules 22, 29, and 30.

10. The importation of grain by the Government should be regarded as a measure only to be adopted in the last resort, and should invariably be reported by telegraph to the Government of India when thought necessary.

11. When food has to be supplied for works undertaken by the Government or by local Committees, or at relief houses, in places where the ordinary dealers are not able to furnish what is needed, it will commonly be the best plan for the responsible officer to enter into an agreement with some one or more respectable dealers to supply the quantity required. Advances may be made on proper security without interest, on the understanding that the grain will be supplied at a price not higher than that current in the neighbouring markets. But this must be a matter for special arrangement in each case, according to the nature of the accomodation given to the dealer, and the local difficulties he may have to meet in providing for the retail sale. The dealers should, so far as is possible, be allowed to manage the retail sale of the grain by their own agents and in their own way, and only in the case of absolute necessity should the officers of the Government undertake the duty of distributing grain themselves. This will not apply, however, to the case of distributions of cooked food, which it may be more convenient to arrange differently.

CHARITABLE RELIEF.

12. The grant of relief will, in all cases in which it is possible, whether the claimant is a man, woman, or child, be made contingent on some labor being given in exchange. This will not apply to casual cases of distress which demand immediate help.

13. The persons asking for relief should be classified according to their capacity for work, and those only fit for such labor as is commonly performed on public works should be given employment of that description.

14. The class of persons not capable of employment on public works should receive relief in special relief or poor-houses organized for the purpose. A description of the arrangements adopted at Moradabad in 1860-61 is given in the appendix.*

15. Persons not fit for labor on public works, but capable of working at trades or handicrafts of a simple nature, should be received into the relief houses; and, as far as possible, be given work of the sort which they can best perform. The necessary raw materials should be purchased to admit of this.

16. It will commonly be found most convenient to require the persons in receipt of permanent relief to reside at the relief house, and this rule should be applied with greater strictness to persons physically unable to work at all. For all persons required to remain at a relief house, temporary shelter must be provided.

17. It will, also, almost always be proper to distribute cooked food at the relief houses and not money. In these cases the grain, &c., may usually be provided without direct interference of the Government, through local dealers, as before explained, the distribution only being undertaken directly.

18. The food offered should, as far as circumstances will admit, be that to which the people are accustomed. The cooking should be conducted with proper regard to caste prejudices.

19. The quantity of food which has been given on former occasions and found sufficient is as follows:—

	Adult man.	Child above 10.	Child below 10.
	ozs.	ozs.	ozs.
Flour	16	12	9
Vegetables ..	4	2	2

The above weights are for the food before cooked. Women generally require something less than men.

20. Clothing may be given as well as food, also medical treatment when practicable.

21. Special arrangements should be made for providing employment and food or money, in exchange for work

[* Almost the whole of this report by Mr. (now Sir John) Strachey will be found in the olume under the several subjects.—J. G.]

performed, for poor women of a social position which leads them to refuse to go to the relief houses. The account of the Moradabad system is given in the appendix.

EMPLOYMENT.

22. Persons employed on relief works should usually be paid in cash and not supplied with food directly. It will, however, be essential for the superintending officer to satisfy himself in all cases in which money wages are given, that the arrangements for the supply of food are such as to enable all the labourers to purchase what they require with reasonable convenience, and within a moderate distance of the works. If these conditions cannot be complied with by the agency of private dealers, measures should be taken for opening relief stores or shops, at which food, &c., may be sold or supplied in fixed quantities, as thought best.

23. Money wages should be only just sufficient to purchase the quantity of food which it is thought proper to allow to the several classes of persons employed, or which would be supplied if food was distributed instead of money.

24. The rates commonly given on former occasions have been :—

Adult men	...	...	$1\frac{1}{2}$ anna daily.
Woman	...	...	1 ,, ,,
Child...	...	...	$\frac{1}{2}$,, ,,

25. It is specially important to take care that, if higher rates are allowed than the above, a day's work is given in return of the full value of the wages paid. Nothing should be done to attract persons to relief works by wages high in proportion to the work performed, the object being to give a mere subsistence and nothing more.

26. Payments of cash or distribution of food on relief works should be made daily, and not at longer intervals.

27. When labourers are employed on relief works with a prospect of continued occupation being necessary for them, suitable temporary huts should be provided for their shelter. Such shelter can commonly be put up by the people themselves, if allowed to reckon the time occupied as though they had been employed on regular work, and paid accordingly.

28. Due attention should be paid to the ordinary precautions for securing cleanliness in the neighbourhood of the localities where the people are hutted. The special sanitary rules lately circulated* are annexed for information, and should receive careful attention.

[* D. P. W. Code, Chapter XIII, sec. 1.
" *See* Standing Rules, General and Sanitary, for Relief Works."]

29. When arrangements cannot be made for the supply of food by the aid of ordinary dealers, the superintending officer of the works must take the supply into his own hands, under such orders as may be issued by the local Government with respect to the manner of purchasing what is needed. The district civil officers will usually be the most suitable agency for directing such purchases.

30. When food is distributed to work-people instead of money wages, it will usually be convenient to issue tickets or tokens to those entitled to receive them, to be exchanged at the store-room for the regular allowance of grain, &c. Otherwise great delay and inconvenience is likely to be occasioned by the distribution.

31. It may be proper when food is supplied to give fuel also, if there is difficulty in procuring it; or to give cooked food if prejudices do not stand in the way. Disease is very likely to be caused by eating uncooked grain.

32. To facilitate payments and the check of the number of persons employed, the labourers should be organized in gangs of convenient strength, placed under a headman, who might receive wages without personal labour.

33. Payments of money wages should, as far as possible, be personally supervised by a European officer, or other person of undoubted integrity.

34. It will rarely be possible to adopt the task-work system on relief works, or to make the payment directly depend on the quantity of work done. It is an essential condition that enough to support life shall be given, whatever be the physical powers of the labourer, and all that can be expected is to take reasonable precautions to prevent deliberate idleness or refusal to work.

35. Frequent inspections of the work and work-people should be made by the superintending officers, and reports submitted on their condition. The conduct of the subordinate officials employed should be carefully watched, and all irregularities promptly checked. When food is distributed, its quality should be periodically examined, and the supplies in the dealer's shops should also be inspected to ensure its being of a wholesome quality.

36. The work done should be measured at short intervals so as to guard against abuses. Daily returns of the number of labourers should be kept, and some system of classification followed, to show the classes to which they belong, and the places whence they come.

37. Careful cash accounts of all expenditure must be kept and rendered with complete punctuality, so as to admit of monthly statements being prepared for submission to the Government and the offices of account.

CHARITABLE RELIEF (resumed).

38. The complete responsibility of giving effect to all relief measures will rest upon the civil executive officers, under such orders as may be given by the local Government. A Central Relief Committee may conveniently be organized in the sudder station of each district suffering from scarcity, to assist the local civil officers, and the general direction of the relief operations of the whole district may, subject to any rules made by the local Government, be placed in their hands.

39. Relief houses may be required at some of the principal towns of the distressed districts; and at the sudder station such establishments would be directly superintended by the Central Committee.

40. Minor local relief houses, if established in the interior of the districts, should be placed under the control of the Tehseeldar, or any other public officer, or private person in whom the responsible civil authority, or the Central Committee, has confidence. If local Sub-Committees can be formed, it will facilitate the operation. Unless, however, a thoroughly trustworthy person or Committee can be found to superintend such local relief, it will be very doubtful whether it should be attempted, and whether, instead, arrangements should not be made to send the suffering population into the central station.

41. It will be a part of the duty of the persons managing relief houses to see that no able-bodied persons seeking relief are allowed to remain at the relief house for a longer time than is unavoidable, and that they are transferred at once to work upon the most conveniently situated public work in progress in the vicinity. The necessary assistance in money or food may be given to enable such persons to go to the work.

42. It may at times be proper to cause infirm and weakly persons to be carried from their villages to the nearest relief house, and again to assist them to return when the occasion arises.

43. In most cases the local District Road Committee will be in a condition to afford employment to able-bodied paupers on works in localities conveniently placed in regard to the relief houses, so as to give the best possible supervision to the whole of the relief operations.

44. The operations of all Relief Committees, whether the destitute poor be employed on public works under the direction of the Committee, or in relief houses, or be incapable of work, should be so conducted as to admit of regular weekly returns being furnished of the number of persons relieved or employed, and the money or grain, &c., expended in an exact manner.

45. Public works under the Committees should be visited and reported on, at least weekly, by one member of Committee; and the quantity of work done measured and reported to the Committee.

46. The needful arrangements should be made for employing under the Committees, with the sanction of the Commissioner of the Division, a suitable establishment for keeping the accounts and returns which are necessary.

47. The returns and accounts of the local Committees or relief houses should be sent to the Central District Committee, and forwarded by them with a general report to the Commissioner of the Division monthly.

The Commissioner will forward the returns to the local Government in original, with any observations he thinks fit to make.

EMPLOYMENT (resumed).

48. Relief works under the direction of the Public Works Department will be carried out in general accordance with the rules of the Department so far as circumstances will admit. Regular monthly accounts of all disbursements must be rendered with the usual punctuality, and the quantity of work done must be measured periodically.

49. Any loss or increased expense which arises in the execution of a work being carried out under estimates, from the want of skill or strength of the labouring classes employed on it, must be treated as a special charge due to the relief operations. The amount of this loss must be estimated as closely as possible in each case.

50. All needful special establishments should be entertained to secure the vigilant supervision of the works and the prompt and regular submission of the accounts of Public Works officers in charge of relief works. Such establishments may be provisionally authorized by Superintending Engineers, subject to the final orders of the local Government.

51. All that is possible should be done to distribute the supervising agency of Engineers available under each local

Government in the manner most likely to give efficiency to extraordinary operations undertaken to employ the population. Works of minor importance may be suspended, or the establishments employed on them reduced, and transferred to the relief works. Also temporary establishments may be engaged. In these respects the local Governments should use a full discretion.

52. All relief works on which public money is expended should, if possible, be of permanent public utility. The application of subscriptions or Government grants to works which will improve the property of individual landholders, without giving any return to the State, is to be avoided.

53. In selecting works for execution, care should be taken that their character is suitable to the available means of supervision. Minor district works of a simple description may properly be carried on under District Committees. Larger operations should not be attempted if it can be avoided, except with the aid of the Public Works Department.

54. The larger works taken up by the Public Works Department should, as far as possible, be in the least distressed districts, or in localities where there are special facilities for obtaining the necessary supplies of food by reason of the proximity of the railway, a navigable river, a good road, or the neighbourhood or markets known to be well supplied.

55. In arranging for the prosecution of such works, it will be expedient to make an approximate estimate of the quantity of work to be done, and thence to reckon the number of persons who can usefully be employed in each locality, or on a given length of the work at one time. On such a calculation, arrangements can be made for directing the population seeking relief to the work where they can be most beneficially employed. These estimates will also admit of the quantity of food likely to be required being approximately determined.

TEMPORARY EMIGRATION.

56. One of the great resources of a population suffering from scarcity is temporary emigration to better supplied districts. Nothing should be done to interfere with the natural operation of this means of relieving a suffering district by unduly stimulating the employment of the population within the district, after the available resources have become seriously reduced, and evidence is given that the deficiency is not being made good. On the contrary, it may even be proper to assist such emigration, though in so doing caution will be

necessary. Where large public works are in progress on a scale to admit of the employment of large numbers of persons, the suffering population may, with much advantage, receive public help to enable them to reach such works. The facilities of transport given by the railways may, without objection, be taken advantage of in giving practical effect to such a measure.

GENERAL CONSIDERATIONS.

Employment to be timely.

57. It is important that the means of obtaining work and food should be brought within the reach of the people of a distressed district as early as possible, and that the offer of relief should not be delayed so long as to lead to their strength being destroyed by continued want before they are provided with employment. All danger of creating any objectionable interference with the natural demand for labour on these occasions is at once rendered impossible by properly limiting the wages offered on relief works. If the rate is fixed so low as merely to give a bare subsistence, it is certain that no one will seek employment on the relief works who can do better for himself in any other occupation. When a real pressure begins, the real sufferers will be led to the works, and as soon as that pressure is taken off, they will leave them.

Three forms of relief distinguished.

First, entirely gratuitous, without labour.

Second, partially gratuitous, with some labour.

Third, in no way gratuitous, full labour.

58. The distinction between employment in time of famine on ordinary works where a full rate of wages is given and a full quantity of work is exacted in return, and on relief works, where a bare subsistence is given for whatever work the labourer can perform, must be distinctly remembered. The two classes of works may, with perfect propriety, be going on at the same time, not only without interference, but with mutual advantage. The relief house at which support is given without labour; the relief works at which subsistence is given for a minimum of labour; and the ordinary works where ordinary wages can be earned for the full day's work, provide for the labouring population a gradation between the most complete pauperism and misery and the healthy state of self-supporting labour.

COMMUNICATIONS.

59. The local Government, in time of severe famine, should take special precautions for watching the operations of railways, and the condition of main lines of road, or navigation, &c., by which the import of food on a large scale takes place. Active measures should at once be taken to remove any obstructions

which may arise, and the immediate co-operation of the Government of India should be solicited if the evil seems one beyond the immediate powers of the local authorities. The state of the railway stations at which the imports and exports chiefly take place, and of the approaches to them should receive constant attention, and any disposition towards the choking of the traffic should be instantly attended to.

RESPONSIBILITY.

60. The occurrence of a famine is an emergency for which no rules can ever properly provide. The supreme authority cannot do more than indicate the course which past experience points out as likely to be the best, and leave the application of the general principles to the local executive officers. On such occasions, no rules can relieve public officers of their responsibilities, still less can the absence of instructions be held to justify inaction; and any conflict of authority which shall cause obstruction to the execution of needful measures will be most blameworthy. With the greatly improved means of communication of the present time, there can now hardly ever be sufficient reason for subordinates not instantly seeking instructions when in doubt, or instantly reporting measures adopted on their own responsibility, for which there may not be apparent authority, or regarding the propriety of which there may be doubt.

61. If it be thought necessary, from the severity of scarcity, the local Government may appoint a Special Commissioner to superintend and control the relief operations. The Commissioner would advise local Committees, and see that the experience of one place was utilized generally. A General Committee may conveniently be associated with the Special Commissioner, or in some cases may perform the duty of general supervision instead of a Special Commissioner.

ACCOUNTS.

62. A small special office of account may also be organized, if thought desirable, under the Special Commissioner or General Committee, or otherwise, to control and audit the expenditure of the District Relief Committees.

63. The grants-in-aid given by the Government to local Committees would be treated as final disbursements in the public accounts; but it would be an implied condition of such grants that proper accounts of the detailed receipts and expenditure of the Committees should be furnished to the Government for audit in such forms as were thought suitable.

64. Disbursements by public officers made directly for relief purposes would be treated in the public accounts like any other disbursements, and charged against the special grant which would be made by the Government of India for the purpose. The Special Relief Account Office, if organized, should receive copies or abstracts of this expenditure to incorporate in a general account of the whole outlay.

THE REMISSION OR THE SUSPENSION OF LAND TAX.

65. The general remission of the land revenue on a large scale will seldom be necessary, although it may be proper to grant a temporary suspension of the demand. The complete failure of crops is most commonly confined to limited areas, and even in the worst seasons, there will be some estates in which the loss is small, and more in which the deficiency of produce is compensated by the rise in prices. In 1860-61 the loss in the North-Western Provinces hardly exceeded six or seven lakhs out of about 148 lakhs of rupees. At the same time the Government should be prepared to allow remission of revenue in every case in which it may be shown to be really proper.

66. When remissions of revenue are made, they should be contingent on a suitable remission of rent being proved to have been made by the landlord. In some cases, it may be expedient, when the destruction of crops has become an ascertained fact, and under such limitations as may be named by the local Government, to invite the landlords to remit or suspend the collection of rents, on the assurance that a corresponding remission or suspension of the land revenue will then be allowed to them.

67. It must be borne in mind that the greatest and earliest pressure of a famine falls on the poor of the non-agricultural classes. No doubt the agricultural population may, in very extreme cases, eventually suffer almost as much, but in the majority of cases, they will have some stock of grain remaining when the scarcity begins, and they will be the first to derive the advantage of whatever supply may be obtained from such crops as come to maturity.

*Extracts from a Resolution of the Government of India, Department Public Works, dated 24th September 1868, in view of the famine of 1868-69, North-Western Provinces, and re-published in November 1873, for Bengal.**

Forcible reduction of the price of private-owned food-grain on no account to be attempted.

5. In proceeding to consider the manner in which the Government should act if severe scarcity arises, His Excellency in Council would first most earnestly impress upon all persons in authority the necessity for not permitting the smallest interference with the ordinary operations of trade during the continuance of the scarcity. On this subject the following extract from a paper drawn up in 1861 by Mr. J. Strachey, then Collector of Moradabad, may be regarded as expressing the views of the Government of India at the present time :—

"There is one other point connected with this part of the question to which it is desirable to refer. The Government has already publicly expressed its disapproval of all interference by its officers with the object of reducing the price of food. I believe that orders still more strong and explicit would be useful. Unfortunately public education in these matters is at a miserably low ebb. In times of difficulty like the present, almost every Magistrate is constantly urged, both by Englishmen and by natives, to interfere, in some way or other, for the purpose of cheapening food, or of rendering it easier of access to the consumers. Reports frequently become prevalent that in some part of the country such interference has been actually practised. Whether these reports be true or false, they are extremely mischievous. The determination of Government to allow no such interference ought to be so notorious, that reports of this kind shall obtain no credence. These rumours are the more readily believed, because they fall in with the general idea of what is proper and probable. The more suspicion of any interference of the kind is sufficient to check the speculations of the corn merchants, and it cannot be doubted that this is a cause which often, in this country, has the effect of stopping the exportation of grain from distant markets."

It cannot be too clearly borne in mind that in time of extreme famine, when it is impossible to supply the deficiency of food by importation, the main safeguard against general starvation is the reduction of consumption, and that this can only be effectually brought about by a rise of prices. The grain-dealer, therefore, while he works for his own personal advantage by raising the price of food as it becomes scarce,

* Only the portions admitting of general application are re-printed here. The omitted paragraphs refer to specific works in the North-Western Provinces, and other subjects of temporary or local interest. The abstracts are by the compiler.—J G.

is in fact providing the means for securing the community against the extremity of famine, and his action, so far from being, as it is too often ignorantly described to be, that of a public enemy, is much more that of a public benefactor.

Exceptional circumstances under which alone Government will import grain.

6. Another point of great importance is that there should be no appearance or suggestion of Government interference in the introduction of grain, unless under most exceptional circumstances, which, so far as the Governor-General in Council at present sees, can hardly arise in the districts of the plains. The experience of the famine in Orissa may possibly be brought forward as an argument for direct Government interposition on the present occasion. But the analogy of that case should not be permitted to lead to any disregard of the true principles which it is important to observe. To quote again from the paper before noticed—

"There is no want of private speculation engaged in bringing grain from other districts. The actual quantity of food imported, although insufficient, is still very large, and any attempt by the Government to import grain upon its own account, or any interference with the operations of private traders, could hardly fail to be mischievous. 'Direct measures," says Mr. J. S. Mill, "at the cost of the State, to procure food from a distance are expedient, when, from peculiar reasons, the thing is not likely to be done by private speculation. In any other case they are a great error. Private speculators will not, in such cases, venture to compete with the Government, and, though Government can do more than any one merchant, it cannot do nearly so much as all merchants.'"

The true limitation of the action of Government in this respect is here given. So soon as the Government is satisfied that private trade is manifestly inadequate for the introduction of grain into the suffering districts in sufficient quantity, then the analogy to the position of Orissa will be established, but not till then. The case of severe scarcity in the hill districts of Kumaon and Gurhwal, in which the means of communication are extremely bad, and where there is virtually no internal commerce except on the very smallest scale, is one in which the direct action of Government in importing grain has on former occasions been exercised, and would, under the rule above laid down, be fully justified. But judging from past experience, it may safely be assumed that the enterprise of individuals will, in the open districts of the plains, no more fail on this occasion than it has failed before under similiar circumstances. The probabilities are altogether in an opposite direction. The greatly increased facilities for cheap transport given by the railways now open will do much to stimulate the activity of trade, and to draw into the impoverished districts supplies from a distance in a manner not before possible.

Example—North-West Provinces, 1860-61.

The Governor-General in Council desires to point out in a marked manner that during the calamity of 1860-61, Sir G. Edmonstone, the Lieutenant-Governor of the North-Western Provinces, allowed no

Government interference of any description with the grain trade, and left the supply of food to the ordinary operations of the commercial community with most satisfactory results. It is apparent from the known facts that in that year, so far as the means of communication and transport available admitted, the import of food on a very large scale commenced as soon as the scarcity declared itself in a distinct form, and that the imports continued until the pressure ceased.

Markets to be watched.

While, therefore, the only safe general rule will be to exercise no direct interference with the supply of grain, it will yet be most important to watch the condition of the markets, and to ascertain as exactly as possible the amount of the importations and the quarters from which the supplies are received. If an extreme condition of want arise, it may be right to inquire whether aid could be obtained from any of the more distant markets to which the action of private trade had not reached, and in the last resort the co-operation of the Government as an importer might be desirable. But these are contingencies on which a correct judgment can only be formed as the occasion actually arises.

Capacities of private trade in England and in India respectively.

7. It may be useful, in illustration of the powers of traders to deal with great operations, such as the feeding of a population of millions, to observe that it is a fact beyond question that the present normal condition of England in respect to the supply of grain for the food of the people cannot be less unfavorable, if the imports from the foreign countries are disregarded, than that in which a province of India is placed in a time of famine. The true difference in the two cases is, that in England a very active and enterprising commerce has been established, involving the use of a large capital, by means of which the wants of the country are most closely watched and met as they arise. The foundation of such a commerce is without doubt to be traced to the advanced intelligence of the people as much as to their greater wealth, and to the far superior means of external and internal communication. An accurate knowledge of the real stock of food in the country, and of the quantity required to meet the wants of the people, must always be of essential value in leading to the establishment of a commerce of this sort on a satisfactory footing. In India unfortunately the means of obtaining such knowledge are singularly small, and there is hardly any other test for ascertaining the stock of grain remaining than the current price in the markets.

Price-currents.

8. The publication of the prices of grain and other articles of food at short intervals has on former occasions been suggested, and this measure will again be worthy of adoption. In attending to this, all practicable precautions should be taken to ensure that the returns represent fairly the actual market rates of the commodities named. It is known that in

many cases the official price-currents have been very unreliable. Further, the movements of grain by the railway, or the chief lines of road, or by water, so far as the information can be got without exciting suspicion of the motives of the Government, might also with great advantage be recorded and published at short intervals.

Relief—The able-bodied and the weak-bodied.—Labour-tests.

9. Passing next to the more detailed consideration of the system to be followed in giving relief, it may first be remarked that, so far as it is possible, a labour test should be insisted on. But it will be right to make a distinction between the able-bodied and the persons who are from any cause unfit for ordinary labour. It will by no means invariably follow that one labour test will be properly applicable to all persons alike. To require that those who cannot usefully be employed on public works should submit to such labour as a preliminary condition to receiving relief, is neither humane, nor expedient. As far as possible, those who are able to labour on public works should be separated from the remainder, and for the latter, relief might more suitably be provided in poor-houses organized on the sort of system adopted at Moradabad and other places in 1860-61. Persons relieved at poor-houses would be set to do whatever work was best suited to their habits or physical powers. Only in extreme cases would relief be given without some labour. The system of aiding the poorest class of females, of such social position that they cannot be induced to resort to a poor-house, which was adopted at Moradabad, may also be made to serve a very useful purpose.

Mr. John Strachey and Mr. John S. Mill on labour-tests.

10. On these subjects the following extract from the report by Mr. J. Strachey may be usefully added :—

"It is not possible to look upon human suffering from an economical point of view alone. If we can save people from present starvation, we must do so, although the measures that we adopt may add to the difficulties of the rest of the community, and may bring with them evils which cannot be avoided. But the dispensers of public and private charity ought distinctly to acknowledge those evils, and strive to reduce them to a minimum. 'The problem,' as Mr. J. S. Mill says regarding Poor Laws,' is how to give the greatest amount of needful help with the smallest encouragement to undue reliance on it.' Whether relief be given in the shape of simple charity, or in return for labour performed upon public works for the Government, the relief must be no greater than can be helped. It must be remembered that I am now assuming the existence of absolute famine and an actual deficiency of food. These conditions being granted, it is better, although it seems hard to say so, that we should give somewhat too little than too much."

Danger of indiscriminate relief.

"The relief must never, even in times of less extreme pressure, be so lavish that the objects of our charity are placed in a better position than that held by those who are managing to support themselves by their

independent exertions. Otherwise, the honest endeavours of the poor will be checked, and they will be encouraged to place their dependence on something far less really able to help them than their own determination. As the expenditure of money and of food increases, so will the prices of food continue to rise; the circle of distress will go on constantly widening; the poor who had not desisted from their labours, and who had not been tempted by the hope of obtaining better wages on the Government works than they could obtain for themselves, will be compelled by the price of food to abandon their own exertions for their own support. "The first and most essential of all conditions of relief," say the English Poor Law Commissioners, "is that the situation of the pauper, upon the whole, should not be made really or apparently so eligible as the situation of the independent labourer of the lowest class. As the condition of the pauper class is elevated, the condition of the independent class will be depressed, their industry impaired, their employment rendered unsteady, and its remuneration diminished. Such persons, therefore, are under the strongest inducements to quit the less eligible class of labourers, and enter the more eligible class of paupers."

"The general principles upon which public charity ought to be afforded are equally applicable to the able-bodied and to the infirm. It is a great mistake to suppose, as people have often done during the present scarcity, that every person apparently unable to work is a fit object for charity. The evils of indiscriminate private charity are universally admitted, but indiscriminate public charity is far worse; and it is the more injurious because it is the public recognition of a false and mischievous principle."

Poor-houses for in-door labour.

"The rule laid down by the Government that the able-bodied poor shall receive relief only in return for labour was evidently the first essential of a reasonable system. But it is often difficult in practice to draw the line between those who are, and those who are not, able-bodied. Public works, undertaken by the Government, cannot, whatever be the scale of operations, give relief to all who require it. This is specially the case when, as at the present time, the chief sufferers belong to the non-agricultural classes. Many are incapable of working on roads and canals, who would be able to perform a fair amount of labour if employed in the ordinary occupations to which they have been accustomed. Many are physically unfit for out-door work, who are well able to perform work of a sedentary kind. This is the case with great numbers of women, and especially with those who have young children from whom they cannot be separated. It is useless to attempt to make people perform work for which they are altogether unfit. Not only is the result failure with respect to them, but they render it difficult to obtain a fair amount of work from the others associated with them, who are really able, and who might be willing to work. If, for example, there be a hundred applicants for relief, all of whom are capable of performing some kind of work, and out of this number only fifty are really fit for employment in road-making, only those fifty should be so employed. The remaining fifty

ought to be employed in some other way ; even if the employment be unprofitable, the loss will usually not be so great as under the other system. In times, therefore, of great distress, it becomes necessary, in addition to undertaking public works, to establish properly organized poor-houses, which shall be at the same time, strictly speaking, work-houses. Owing to the extreme cheapness and simplicity of the mechanical appliances required for carrying on the commoner Indian manufactures, this is not so difficult as it might be supposed to be."

Migration from distressed districts.

11. The able-bodied who are fairly fit for out-door labour should alone be employed on public works. When it becomes necessary to undertake such works for the relief of the people on a great scale, they should, as far as possible, be set on foot, not in the districts where the distress is greatest, but in some other localities better provided with food. On this subject Mr. J. Strachey further remarks:—

" It must be admitted that the importation of food in quantity sufficient to supply completely a deficiency of production is, in times of actual famine, impracticable in most of the districts of these provinces. The only thing that remains which can afford relief is a reduction of consumption. We have in possession a certain limited quanity of food, and the object to be aimed at is that this food shall be economised to the utmost, and be made available for the greatest possible number of persons.

" Up to a certain point this object is gained by mere increase in the price of food, but this increase, although in itself necessary and beneficial, involves, when it becomes extreme, the starvation or misery of thousands. The difficulties of the position are great. On the one hand, there are multitudes of people who must be saved, if it be possible to save them. On the other hand, we have to bear in mind that, while we are giving food to the starving, we are diminishing the general stock, and are adding to the difficulties of the rest of the community. The diminution of the number of consumers is the only efficient remedy which, under such circumstances, remains. And this, in countries dependent upon their own supplies, is one of the natural and universal remedies against famine. Where there are no proper means of communciation, and the existing stock of food cannot be sufficiently increased by importations from without, the people who cannot get food at home remove themselves to places where food is obtainable. It is easier for them to go to the food than for the food to come to them. Famines are hardly ever universal through a great extent of country, and in India, as in other countries similarly situated, temporary emigration has always been, in times of difficulty, one of the chief modes of relief. When rain falls, and prospects improve, the people will not be long in returning to their homes. There is no danger that the number who remain will not be sufficient for the cultivation of the land meanwhile. The apprehensions that we sometimes hear expressed on this point are, I believe, quite unfounded. Particular estates may be injured by such emigration, but there is no danger that the country at large will suffer. There are, perhaps, no people in the world more attached to their homes than the

people of this country, and if they do not return after their emigration to other quarters, it may safely be assumed that their position has been improved by the change. The question practically is whether people shall remain and die, or emigrate and live. Tens of thousands have, at the present time, answered this question rightly. There is hardly a village in some parts of these provinces from which many of the people have not emigrated to more fortunate districts.

"All measures must be mischievous which tend to check this natural process of relief. Plans which are excellent in times of partial scarcity, when food can be obtained by paying for it, become inapplicable in times of actual famine. Thus, if the Government undertake great public works in a province where the supply of food is insufficient, and into which the importation of food on a sufficient scale is impossible, the final results may probably be mischievous rather than useful. If they be undertaken on too large a scale, or, if the wages offered be much more than sufficient to save people from starvation, the effect will be that the consumption of food instead of being checked will be stimulated; people who would otherwise have emigrated will be kept at home to increase the number of consumers; the supply of food being limited, the expenditure of money will cause prices to rise, and privation will be brought upon a higher class who might otherwise have escaped.

"The relief afforded by the Government in the distressed districts ought, therefore, to be no greater than will preserve the people from actual starvation, and every encouragement to emigration should be given. Great public works should be undertaken in those parts of the country where no scarcity exists, and where the supply of food is not likely to run short. These works should be set on foot at the nearest points to the distressed districts at which these conditions can be fulfilled. It is almost unnecessary to add that other conditions have to be fulfilled also. The works, for instance, should of course be useful and remunerative works.

"The certainty of obtaining work and food will act as a stimulus to emigration, and will draw away from the distressed districts those who are able to move. In cases of great emergency, the Government should do still more. It ought to take measures for assisting this voluntary emigration, by giving to the emigrants the means of subsistence on the road. It may even become necessary to organize a system for the promotion and regulation of emigration, and for enabling people to return to their homes when the crisis has passed over. The necessity for such measures as this has not actually arrived. But it is possible that it may arrive, and even now it is important that the fact be borne in mind that every reduction in the number of consumers leaves more food available for those who remain."

Relief works.

12. The people employed on the special relief works should be brought together in such numbers as will admit of the most satisfactory direction of their labour to a really useful purpose. To undertake numerous operations widely diffused over the country will almost certainly result in the work done being worthless or nearly so. It is not intended to imply that

minor works may not be properly and usefully carried out locally within the means of the district officers, or that such means may not properly be supplemented by the Government. To give local employment to the population on a scale beyond what has been customary in ordinary years may be very desirable and unavoidable, but to stimulate unnecessarily the collection of numbers of starving men by undertaking works of unusal magnitude, where no proper provision can be made for the supply of food, will only tend to exaggerate the evil.

Localities to be chosen.

13. The local Governments should, therefore, at once proceed to consider what works can be carried out within their territories, which shall give the best approach possible to a compliance with the above conditions. It may not be very easy to find occupation in suitable localities in districts free from the pressure of famine. But where this is not practicable, places should be selected to which the supply of food is comparatively easy, either by reason of the vicinity of the railway, a navigable river, or a good road.

Economy and efficiency of work not to be unduly sacrificed.

19. The Governor-General in Council is well aware that to undertake, at such short notice, any considerable part of such a series of works will call for very great energy on the part of the Public Works Department, and will be quite out of the question unless every available means of direction and supervision is applied to the task. It would be easier to allow minor works of secondary public utility to be put in hand locally than to organize the labour of the population on more important undertakings such as those which have been named. But it is very important that the utmost real good should be secured from the employment of the population. This employment and the relief of the people incapable of work will cause a heavy drain on the public finances, and it is incumbent on the Government to do all in its power to utilize, in the best way practicable, the labour which will be placed at its command, and to obtain the best possible equivalent for the outlay which it will have to incur.

Distribution of D. P. W. establishments.

23. The local Governments and Administrations are, therefore, authorized to take what measures seem to them most suitable for disposing, to the best advantage, the engineering establishments under their orders for carrying out such preliminary operations as may, on mature consideration, appear to be best calculated to prepare for giving occupation to a distressed population on a large scale.

The number of officers and subordinates now employed on works of minor importance should be reduced to the utmost, and their places supplied, so far as is essential, by such means as can for the moment be best obtained. In military stations, officers of the army may be no doubt found who can carry on less important work for a few months; and

where the occasion may arise, the services of civil officers may without hesitation be also made use of in like manner, or temporary establishments may be engaged.

All works which are not of emergent importance should be postponed to admit of provision being made for the employment of the population in the most useful way possible. This should not, however, be interpreted to signify that any large work now going on, such as the construction of the new barracks, should anywhere be suspended. Such works will continue to be of much service in giving employment, but it will be important to economize the means of supervision as much as possible.

Railway Companies' works.

21. For the suggested railway works, the local Governments and Administrations should not hesitate to solicit the co-operation of the Railway Companies' officers, which, so far as the circumstances of their more regular occupation will admit, the Governor-General in Council feels assured the Agents of the Companies will readily sanction.

Railway Companies' officials.

All railway works to be undertaken for the relief of the population should, unless the Railway Company concerned should otherwise desire, be carried out in the first place at the cost of the Government. Work, under the circumstances contemplated, is likely to cost more than in ordinary times, and it will therefore be but just that a Railway Company should be called upon to pay no more than the ordinary price for the work done. It may, however, be hoped that the Railway Engineers will be made available for the supervision of such work to the extent that is practicable.

22. Wherever works are thus taken up under the Public Works Department or Railway Engineers, it will not be difficult to ascertain beforehand the probable quantity of work to be done, and the number of persons who can conveniently be employed in each locality. With this information the necessary arrangements for distributing the population to be relieved to the different works can be determined, and the system of providing them with food matured.

Sanction and audit generally.

23. It should be the aim of the local Governments and Administrations in these operations to comply, as far as circumstances will admit, with all the ordinary rules regarding the disbursement of funds and accounting for them. In the larger works which, under ordinary conditions, called for the sanction of the Government of India, where a general approval has not already been given to the scheme, an outline or approximate statement of the contemplated operation and its cost may be furnished before work is actually begun. As regards the irrigation works [1868-69], it will be desirable to obtain a preliminary approval of the general plan of operations from the Inspector-General of Irrigation Works, who is likely to remain in the North-Western Provinces or the vicinity till end of the year.

Discretion to local Governments and Administrations.

24. But the Governor-General in Council, while thus expressing his desire that these precautions should, as far as possible, be attended to, will not withhold from the local Governments and Administrations the power of acting at once on their own judgment, in every case in which it shall seem to them essential to order the commencement of any work for the purpose of giving occupation to the people. It is the wish of the Government of India that work shall be everywhere offered to the population as soon as the grant of relief in such a manner is thought by the local authorities to be necessary. It is most expedient that such help should be offered before the population becomes seriously affected by want, and no formalities or risk of eventual loss on the operations put in hand should be allowed to stand in the way of thus giving relief to any section of the community which seems to be seriously suffering from the high price of food.

It is not thought necessary to dwell at length on other matters relating to the manner of dealing with the emergency which may arise. In the North-Western Provinces, the orders given by the late Sir G. Edmonstone, the Lieutenant-Governor in 1860-61, will serve as excellent models to be followed. These and other papers of interest will be found in an appendix to this resolution.* For convenience of reference, a memorandum approved by the Governor-General in Council is also annexed, embodying the chief points to which attention has, on other similar occasions, been directed, or which the Government of India now thinks of importance.

It only remains for His Excellency in Council to add that the Government will be prepared to contribute in aid of local relief a sum equal to the amount of private subscriptions for that object, in every case in which the local Government or Administration shall recognize the propriety of such a course.

Bengal.
N. W. Provinces.
Punjab.
Oudh.
Central Provinces.

Ordered, that this resolution be recorded both in the Home and Public Works Departments, and forwarded to the local Governments and Administrations noted in the margin for information and guidance.

* The memorandum of 1868-69 approved by the Governor-General in Council, has been cited by the Viceroy in 1873, and will be found at pages 1—13 of this volume. Mr. [Sir] John Strachey's note on the Moradabad relief measures, 1860-61, is re-printed in this volume, but arranged under the various subjects treated of in this volume. The other papers being more of historical than administrative interest are not re-printed.—J.G.

GENERAL POLICY.

COURSE PURSUED IN THE N. W. PROVINCES, 1869.

(From Mr. Henvey's Memoir.)

Extent of the State's Responsibility.

On the 9th December 1868, it was ruled by the Government of the North-West Provinces that relief of *purdah-nasheens*, or respectable women, was eminently a charitable work, and as such must be taken up primarily by private benevolence, the Government contributing equally. Again, on the 2nd January 1869, Collectors were advised how to treat bodies of immigrants. They were to be passed on in gangs if possible. In the event of their refusing work, they were not to be permitted to starve, whether charitable funds were available or not; and it was added that every district officer would be held personally responsible that no death occurred from starvation which could have been avoided by any exertion or arrangement on his part, or on the part of his subordinates. The latter portion of the above order resulted from a correspondence with the Government of India, in which the Governor-General expressed a desire that the State should distinctly announce its full responsibility for the really helpless irrespective of charitable contributions; and that district officers should be desired to make such advances for food as might be necessary to save life, without regard to sums contributed by private persons. To this statement of the Government responsibility, the Lieutenant-Governor in some measure demurred, and His Honor's view was subsequently adopted. It was that the equivalent of private contributions was not the maximum limit of the Government gift, but an appropriation for disposal by the Relief Committees. Charitable relief must be held primarily the care of the public; but if public charity should fail from any cause, the Government must step in to save life. If the liability of the State, *in the first instance*, were recognized, then there could be no ground for appeal to the public for aid towards performing an obligation devolving absolutely on the Government. It was determined on all sides, however, that whatever the procedure, no lives that could be saved should be lost, and hence the orders to district officers enforcing personal responsibility.

Relief of purdahnasheens and immigrants.

Extent of the State's responsibility as understood by the Government, N. W. P.

Relief works.—Province and Responsibility of Civil Officers and D. P. W. officers respectively—N.-W. P., 1869.

On the 27th January 1869, Collectors were told to assist officers in charge of works by every possible means. The officer in charge was held primarily responsible for feeding, hutting, and sanitary arrangements, but the district officer was to aid in procuring food, and in all other respects in which his co-operation might be needed.

Rates adopted in the three several modes of relief—(1) full labour, (2) light labour, and (3) gratuitous.

In maturing and carrying out plans of relief, the Government of the North-West derived great advantage from the instructions laid down by the Government of India in Home Department despatch No. 3846, dated 22nd September 1868.* The principles embodied in those instructions were loyally and carefully observed. To those capable of labour gratuitous relief was not dispensed. Residence in the poor-houses was generally enforced. Rations were usually given in cooked food, and wages in money: neither exceeded the authorized sale, *viz* :—

RATIONS.

	Flour. Oz.	Vegetable. Oz.
Adults	16	4
Children above 10 years of age... ...	12	2
Children below 10 „ „	8	2

WAGES.

	Pie.
Adult man	1½
Adult woman	1
Child	0½

Distribution and payment, where possible, were made under supervision of European officers. Accounts were kept and reports rendered. No interference with trade was allowed, and no importations were undertaken, except in most special circumstances, and with the express permission of Government.

Deviation from instructions in one particular.

In one point, however, the plan of the North-Western Provinces relief operations differed from the standard. It was the intention, apparently, of the Supreme Government that, while the able-bodied poor were collected on large public works, those incapable of *hard* labour should be provided with appropriate work *in the poor-houses*. In the North-Western Provinces system a slightly different classification was adopted. When it could be arranged conveniently, the able-bodied labourers were sent to the large public works; but otherwise—and, moreover, in the case of those who, though incapable of hard labour, were equal to light out-door work—employment was given, either at full or famine rates,

* [See pages 1-13 of this volume.—J.G.]

on local projects, such as the roads and bridges of the Road Fund and Municipal Committees. Those, again, who were not capable of out-door work of any kind, but yet could find strength for manual labour, were kept with the infirm and helpless at the poor-houses, and suitably employed in weaving, spinning, &c.

Grain Trade.

Besides the organization of labour and charitable relief, this heading includes the proceedings adopted with the view of stimulating trade. One cardinal point insisted upon was that private enterprise should not be interfered with; but it was admitted that circumstances might possibly arise in which private enterprise should be insufficient to supply the wants of outlying tracts, and importations of food on the part of the State should become absolutely necessary. Such circumstances did arise in two prominent instances, *viz.*, in the districts of Jhansie and Ajmere. In both instances the North-Western Provinces Government stepped in, with the sanction of higher authority, and ordered the importation of considerable quantities of grain. The grounds and results of the measures are fully described in following chapters. They are merely noted here as special deviations from the policy generally pursued by Government.

Efforts to stimulate grain trade—
(1) By importations.
(2) By reduction of transit charges.

Importation of grain into Ajmere and Jhansie by Government.

Another attempt made was to cheapen transport and equalize rates over as large an area as possible by the reduction of railway charges for the carriage of food-grains, the difference between the ordinary and extraordinary scale being reimbursed by the State to the Companies. This measure, as well as the exemption of grain from tolls at ferries and octroi barriers, was in force for so short a time (little more than two months at the beginning of 1869) that it is difficult to say to what extent the desired object was attained. The impression at the moment among officers of experience was that the influence upon market-rates was imperceptible. But, as will be shown hereafter, there can be no doubt whatever that grain traffic, on the railway at least, was immensely stimulated during the first-half of 1869; and very probably some portion of the relief, which undoubtedly followed the *rubbee* harvest of 1869, should be ascribed to the enormous movements of grain at that time.

Reduction of railway rates, and exemption of grain from tolls.

The result of above.

Tuccavee advances.

Tuccavee advances for the construction of wells, embankments, and watercourses, are common in ordinary seasons. The money is advanced without interest, and is repayable by instalments extending usually over three years, on the security of the landed estate of the person to whom the advance is made. But in times of famine it has been usual to extend the system, and to permit advances for the purchase of seed and plough-cattle. In 1860-61, nearly £35,000 were expended on this account.

Ordinary *tuccavee* advances.

Extension on occurrence of famines.

Such advances are of the utmost advantage to the cultivators. One of the first and most fatal effects of drought is that fodder fails. Then the cattle either perish of hunger, or are sold at nominal prices to butchers, or are driven off to the *khadirs* of the great rivers or submountane forests, where thousands die of disease engendered by eating grasses to which they are not accustomed. If a farmer loses his plough-cattle, and is too poor (as he very often is) to replace them, the land must lie waste; or if he goes to village money-lender, he must borrow at exorbitant interest. And similarly with seed-corn. The peasant rarely has a store of grain from which he can draw when a harvest is lost. He depends on the village *bunniah* or grain-dealer for advances in kind, which are generally made on the understanding that at the next harvest they will be repaid with interest. But occasionally it happens that the supplies are so slender, or the dealers so apprehensive of further failures, that scarcely any rate of profit will tempt them to advance seed to the cultivators. In the latter case, the land must remain unsown; in the former, the land is sown, but the cultivator too frequently is involved in ruinous embarrassment. Whether, therefore, in replacing plough-cattle or in buying seed, the benefit of Government advance, free of interest and repayable on lenient terms, can scarcely be over-estimated. Details to be given hereafter will show that the Government of the North-West Provinces disbursed over £100,000 as *tuccavee* in the two years 1868-69 and 1869-70. Of the above sum more than £30,000 were given for plough-cattle and seed.

Ruinous effects of the loss of plough-cattle.

Failure of seed-corn.

Benefit derived from such advances.

Amount disbursed by the Government of the North-Western Provinces.

From what has been written, the Lieutenant-Governor's policy [N. W. P.] may be summed up as follows:—

First.—To ensure that the Government should not be taken by surprise, and that the course of the seasons state of agriculture, trade, and people, should be carefully watched and regularly reported; the most effetual use being made of the means which the Government possessed for counteracting the drought.

Secondly.—To organize a system of labour and charitable relief which should, as far as possible, avert starvation, and at the same time secure a sufficient test of real distress and yield as much return to the State as could be looked for under the circumstances. Also to guard against an absolute deficiency of food by authorizing importations of grain where the necessity might be clearly demonstrated.

Thirdly.—To accept the responsibility of saving life at any cost, while looking to public charity primarily for the support of those who were incapable of labour. And with the view of enabling the people by their own exertions to recover from the calamitous effects of the famine, to grant liberal remissions of revenue where necessary, and to advance money for agricultural stock, without which villages must have remained empty and lands untilled.

Orissa, 1867.—The Government and Central Relief Committee. Their respective provinces.

(Mr. Hobhouse's Report, pp. viii, ix.)

The above extracts shew to some extent the state of things that the Executive [Relief] Committee [Calcutta] had been called into existence to meet; and briefly it may be said that whereas the famine of 1866, followed by the inundation at the close of that year, had left thousands of women and children without the means of support, and left the population of the province of Orissa generally with insufficient (to what extent insufficient it was not known, and could not be even approximately calculated) means of subsistence, the main objects of the Executive Committee were to shelter and support the destitute (widows, orphans, the infirm, and the like), to supplement the short supply of food to the population of the province generally, and to devise means by which, while help was given to those in need of it, there was yet in those means the ulterior aim of gradually leading the population back to their former avocations.

The Committee at once placed itself in direct communication with the Government, and the following was the plan on which, with, in every important matter, the previous sanction of Government, the Government and the Committee were to work together.

The Government took upon itself the expense and responsibility—

1*st*.—Of importing by sea all the rice required for relief.

2*nd*.—Of storing such rice in the first instance in order to its distribution.

3*rd*.—Of providing all the rice required in lieu of pay in the Public Works Department.

4*th*.—Of making all tuccavee, seed grain advances required by zemindars for sowing and other purposes, or for the purpose of local improvements to estates.

5*th*.—Of meeting at its store depôts all requirements for rice from the public, and from the Famine Relief Committee, at certain fixed prices.

6*th*.—Of providing, in concert with the East India Irrigation Company, public works sufficient to meet all demands for labour.

7*th*.—Of providing a special staff to superintend the operations of the Famine Relief Committee.

The Famine Relief Committee, Calcutta, took upon itself the expense and responsibility—

1*st*.—Of collecting and distributing public subscriptions.

2*nd*.—Of the carriage of rice from the Government depôts into the interior of the country.

3*rd*.—Of providing sub-depôts, shops, and other means, for the sale and distribution of rice in the interior of the country.

4*th*.—Of administering relief to the public generally by every process except those left in the hands of Government.

The [*grain*] transactions on the part of Government were carried on by Mr. Schalch, the Junior Member of the Board of Revenue; and for the purpose of these transactions, Mr. Schalch had under him the

Commissioner of the province and a staff of officers entirely independent of the Committee, whose sole duty, so far as their connection with the Committee was concerned, was to import, store, and distribute rice into and out of the Government depôts in Orissa.

All other *relief* transactions were carried on by the Committee on behalf of the community; and they acted in concert with certain local Committees, and had under them a staff of officers entirely independent of the Government, whose sole duty it was to carry on, under orders direct from the Committee, all relief transactions other than those conducted by the Government.

Mr. Schalch represented the Government in the Committee. Mr. Hobhouse, the Chairman, was in direct and constant communication with His Honor the Lieutenant-Governor. The officers composing the staff of the Government and of the Committee respectively were instructed to assist and to work in harmony, the one staff with the other; and throughout the whole period of operations there was not one step of importance taken which had not the previous sanction of His Honor.

The staff placed at the disposal of the Committee consisted of the following gentlemen, *viz.*—

Mr. E. W. Molony, Famine Commissioner, Orissa.

CUTTACK.

Mr. Kirkwood, C.S., Relief Manager.
Dr. Fonsworth and 2 Native Doctors, Medical Staff.
Mr. Jones and Baboo Juggut Chunder Mookerjee, Deputy Collectors.

POOREE.

Mr. Toynbee, C.S., Relief Manager, Mr. Ellis, and 2 Native Doctors.

BALASORE.

Mr. Rampini, C.S., Relief Manager, Mr. Sinclair, and a Sub-Assistant Surgeon.

The Committee was constituted on the 15th February. On the 16th, a first meeting was held. On the 18th, a plan of operations, based on a minute drawn up by Mr. Schalch, was sketched out by the Chairman; and on the 20th this plan was approved by the Executive Committee; on the 1st March, by the Government officially; and on the 6th March following, by the General Committee.

Appendices I to VIII [of the original report] contain a series of papers, extending over a period from the 12th February to the 3rd April 1867, shewing the materials out of which the definite system ultimately adopted by the Government and the Committee was established, and that system will be most conveniently set forth under the following heads:—

1*st*.—Operations connected with the "Import of Rice by Sea."
2*nd*.—Operations connected with the "Import of Rice into the Interior."
3*rd*.—Operations connected with the "Actual Distribution of Relief."

STANDING RULES, GENERAL AND SANITARY, FOR CIVIL ENGINEERS IN CHARGE OF RELIEF WORKS.

D. P. W. Code, Chapter XIIIA.

D. P. W. CODE, CHAPTER XIIIA.

Measures to be adopted in times of Famine.

Measures to be adopted in time of famine.

1. The Government of India has approved of the following principles and measures as suitable for adoption in time of scarcity, or when it may become necessary to offer employment to a population suffering from famine; and they are to be considered as applicable to the operations of the Public Works Department, subject to any special orders that may be issued by the local Government or Administration in each case.

Interference with markets prohibited.

2. Strict injunctions should be given to all local officers to abstain from any interference with the ordinary course of trade in the buying and selling of grain. Under no pretext whatever can any one be held to be justified in bringing pressure to bear on the dealers, however serious may be the want of food, or however high may be the prices demanded. These remarks should be held to apply to military cantonments and stations equally, with civil stations, towns, and districts.

3. The local Government alone can be regarded as having authority to direct measures to be taken for the importation of food into any district from a distance; and without special authority the purchase of grain by public officers, otherwise than for distribution to persons receiving relief, is prohibited.

4. So far as is practicable, the purchase of grain for the purpose above referred to should be made from local dealers; and imports by public officers from distant markets, even for the needful supply of works or relief-houses in operation, should never take place, unless they be specially sanctioned by the local Government. On this subject a reference should further be made to paragraphs 22, 29, and 30.

5. When food has to be supplied for works undertaken by the Government or by local Committees, or at relief-houses, in places where the ordinary dealers are not able to

furnish what is needed, it will commonly be the best plan for the responsible officer to enter into an agreement with some one or more respectable dealers to supply the quantity required. Advances may be made on proper security without interest, on the understanding that the grain will be supplied at a price not higher than that current in the neighbouring markets. But this must be a matter for special arrangement in each case, according to the nature of the accommodation given to the dealer, and the local difficulties he may have to meet in providing for the retail sale. The dealers should, so far as is possible, be allowed to manage the retail sale of the grain by their own agents, and in their own way; and only in the case of absolute necessity should the officers of the Government undertake the duty of distributing grain themselves. This will not apply, however, to the case of distributions of cooked food, which it may be more convenient to arrange differently.

Classes to be relieved and employed.

6. The grant of relief will, in all cases in which it is possible, whether the claimant is a man, woman, or child, be made contingent on some labour being given in exchange. This will not apply to casual cases of distress which demand immediate help.

7. The persons asking for relief should be classified according to their capacity for work, and those only fit for such labour as is commonly performed on public works should be given employment of that description.

8. The class of persons not capable of employment on public works should receive relief in special relief or poor-houses organized for the purpose under the local civil authorities; and such persons should be transferred from time to time, from any works on which they may be found, to the nearest poor-house.

Mode of paying wages when given in money.

9. Persons employed on relief works should usually be paid in cash and not supplied with food directly. It will, however, be essential for the superintending officer to satisfy himself in all cases in which money wages are given, that the arrangements for the supply of food are such as to enable all the labourers to purchase what they require with reasonable convenience, and within a moderate distance of the works. If these conditions cannot be complied with by the agency of private dealers, measures should be taken for opening relief stores or shops, at which food, &c., may be sold, or supplied in fixed quantities, as thought best.

10. Money wages should be only just sufficient to purchase the quantity of food which it is thought proper to allow to the several classes of persons employed, or which would be supplied if food was distributed instead of money.

11. The rates commonly given on former occasions have been—

Adult man	..	..	1½ anna daily.
Woman ..	..	..	1 „ „
Child ..	..	..	½ „ „

12. It is specially important to take care that, if higher rates are allowed than the above, a day's work is given in return of the full value of the wages paid. Nothing should be done to attract persons to relief works by wages high in proportion to the work performed, the object being to give a mere subsistence and nothing more.

13. Payments of cash or distribution of food on relief works should be made daily, and not at longer intervals.

14. To facilitate payments and the check of the number of persons employed, the labourers should be organized in gangs of convenient strength, placed under a headman, who might receive wages without personal labour.

15. Payments of money wages should, as far as possible, be personally supervised by a European officer, or other person of undoubted integrity.

16. It will rarely be possible to adopt the task-work system on relief works, or to make the payment directly depend on the quantity of work done. It is an essential condition that enough to support life shall be given, whatever be the physical powers of the labourer, and all that can be expected is to take reasonable precautions to prevent deliberate idleness or refusal to work.

17. When arrangements cannot be made for the supply of food by the aid of ordinary dealers, the superintending officer of the works must take the supply into his own hands, under such orders as may be issued by the local Government with respect to the manner of purchasing what is needed. The district civil officers will usually be the most suitable agency for directing such purchases.

Arrangements to be made when food is supplied.

18. When food is distributed to work-people instead of money wages, it will usually be convenient to issue tickets or tokens to those entitled to receive them, to be exchanged at the store-room for the regular allowance of grain, &c. Otherwise great delay and inconvenience is likely to be occasioned by the distribution.

19. It may be proper when food is supplied to give fuel also, if there is difficulty in procuring it; or to give cooked food if prejudices do not stand in the way. Disease is very likely to be caused by eating uncooked grain.

20. The food offered should, as far as circumstances will admit, be that to which the people are accustomed. The cooking should be conducted with proper regard to caste prejudices.

21. The quantity of food which has been given on former occasions and found sufficient is as follows:—

	Adult man.	Child above 10.	Child below 10.
	ozs.	ozs.	ozs.
Flour	16	12	8
Vegetables ..	4	2	2

The above weights are for the food before cooked. Women generally require something less than men.

Huts and conservancy.

22. When labourers are employed on relief works with a prospect of continued occupation being necessary for them, suitable temporary huts should be provided for their shelter. Such shelter can commonly be put up by the people themselves, if allowed to reckon the time occupied as though they had been employed on regular work, and paid accordingly.

23. Due attention should be paid to the ordinary precautions for securing cleanliness in the neighbourhood of the localities where the people are hutted. The special sanitary rules are given in chapter XIII, section i A, and these should receive careful attention.

Clothing.

24. Clothing may be given as well as food, also medical treatment when practicable.

25. Frequent inspections of the work and work-people should be made by the superintending officers, and reports submitted on their condition. The conduct of the subordinate officials employed should be carefully watched, and all irregularities promptly checked. When food is distributed, its quality should be periodically examined, and the supplies in the dealer's shops should also be inspected to ensure its being of a wholesome quality.

26. The work done should be measured at short intervals so as to guard against abuses. Daily returns of the number of labourers should be kept, and some system of classification followed, to show the classes to which they belong, and the places whence they come.

Management of works wholly carried out under the Public Works Department.

27. Relief works under the direction of the Public Works Department will be carried out in general accordance with the rules of the Department so far as circumstances will admit. Regular monthly accounts of all disbursements must be rendered with the usual punctuality, and the quantity of work done must be measured periodically.

28. Any loss or increased expense which arises in the execution of a work being carried out under estimates, from the want of skill or strength of the labouring classes employed on it, must be treated as a special charge due to the relief operations. The amount of this loss must be estimated as closely as possible in each case.

29. All needful special establishments should be entertained to secure the vigilant supervision of the works, and the prompt and regular submission of the accounts of Public Works Officers in charge of relief works. Such establishments may be provisionally authorized by Superintending Engineers, subject to the final orders of the local Government.

30. All that is possible should be done to distribute the supervising agency of Engineers available under each local Government in the manner most likely to give efficiency to extraordinary operations undertaken to employ the population. Works of minor importance may be suspended, or the establishments employed on them reduced, and transferred to the relief works. Also temporary establishments may be engaged. In these respects the local Governments should use a full discretion.

Description of works to be taken up.

31. All relief works on which public money is expended should, if possible, be of permanent public utility. The application of subscriptions or Government grants to works which will improve the property of individual landholders, without giving any return to the State, is to be avoided.

32. In selecting works for execution, care should be taken that their character is suitable to the available means of supervision. Minor district works of a simple description may properly be carried on under District Committees. Larger operations should not be attempted if it can be avoided, except with the aid of the Public Works Department.

33. The larger works taken up by the Public Works Department should, as far as possible, be in the least distressed districts, or in localities where there are special facilities for obtaining the necessary supplies of food by reason of the proximity of the railway, a navigable river, a good road, or the neighbourhood of markets known to be well supplied.

Selection of localities.

34. In arranging for the prosecution of such works, it will be expedient to make an approximate estimate of the quantity of work to be done, and thence to reckon the number of persons who can usefully be employed in each locality, or on a given length of the work at one time. On such a calculation, arrangements can be made for directing the population seeking relief to the work where they can be most beneficially employed. These estimates will also admit of the quantity of food likely to be required being approximately determined.

And arrangements for collecting population requiring relief.

35. One of the great resources of a population suffering from scarcity is temporary emigration to better supplied districts. Nothing should be done to interfere with the natural operation of this means of relieving a suffering district by unduly stimulating the employment of the population within the district, after the available resources have become seriously reduced, and evidence is given that the deficiency is not being made good. On the contrary, it may even be proper to assist such emigration, though in so doing caution will be necessary. Where large public works are in progress, on a scale to admit of the employment of large numbers of persons, the suffering population may, with much advantage, receive public help to enable them to reach such works. The facilities of transport given by the railways may, without objection, be taken advantage of in giving practical effect to such a measure.

36. It is important that the means of obtaining work and food should be brought within the reach of the people of a distressed district as early as possible, and that the offer of relief should not be delayed so long as to lead to their strength being destroyed by continued want before they are provided with employment. All danger of creating any objectionable interference with the natural demand for labour on these occasions is at once rendered impossible by properly limiting the wages offered on relief works. If the

Relief to be given early, and on a graduated system.

rate is fixed so low as merely to give a bare subsistence, it is certain that no one will seek employment on the relief works who can do better for himself in any other occupation. When a real pressure begins, the real sufferers will be led to the works, and as soon as that pressure is taken off, they will leave them.

37. The distinction between employment in time of famine on ordinary works where a full rate of wages is given, and a full quantity of work is exacted in return, and on relief works where a bare subsistence is given for whatever work the labourer can perform, must be distinctly remembered. The two classes of works may, with perfect propriety, be going on at the same time, not only without interference, but with mutual advantage. The relief-house at which support is given without labour; the relief works at which a subsistence is given for a minimum of labour; and the ordinary works where ordinary wages can be earned for the full day's work, provide for the labouring population a gradation between the most complete pauperism and misery and the healthy state of self-supporting labour.

Sanitary measures where large bodies of workmen are assembled.

*P. W. Code, Chap. XIII, Section IA.—Sanitary Precautions.**

Sanitary rules to be framed.

1. The Head of each local Government and Administration will cause a set of special rules to be drawn up with the object of preventing outbreaks of disease, and arresting and alleviating the intensity of epidemics, in general accordance with the following paragraphs. Copies of these rules, and of any alterations in them, should be forwarded to the Government of India for information.

Requisites to be considered.

2. The great requisites for preserving the health of the work-people may be conveniently considered under the four heads,—of *houses, food, water*, and *conservancy*. The measures which should be adopted on the actual appearance of disease, and specially of any disease likely to assume an epidemic form, will be separately discussed.

Houses for work-people.

3. Huts of bamboos and grass can be constructed at little expense in most parts of the country, and they will be amply sufficient for the accommodation of the work-people.

Their sites.

4. In erecting them, it is of great importance to select a good site. High ground removed from jungle, but well provided with trees, ought to be chosen wherever it is available. The neighbourhood of rank jungle, grass, or weeds, is particularly to be avoided.

* Standing Orders of 1869.—No. 73.

5. The houses themselves should be raised on an earthen plinth of 2 feet, and with open spaces of at least 10 yards between the different rows. When a good natural site cannot be procured, the drainage should be particularly attended to. Whenever, owing to unavoidable circumstances, the huts occupy a situation in a low, swampy, or otherwise unhealthy situation, the sides should be carefully *leeped* or thinly-plastered with mud so as to exclude the night air; and in such circumstances, it will also be advisable that the people should sleep on raised cots, or *machans*.

And mode of construction.

6. It is very important that there should be no overcrowding: each person should be allowed at least 50 superficial feet, and care should be taken to see that the houses are kept clean and in good order, and that not less than the space above-mentioned is rearly provided.

Superficial area to be given.

7. As regards food, in most parts of India no difficulty will be experienced in providing a good and sufficient supply. In many cases, no special arrangements will be necessary, as the coolies will be able to draw their supplies from a neighbouring market without any difficulty. Wherever no such facilities exist, it will be advisable to organize a bazaar, and to see that the food provided is proper, both as regards quantity and quality. In this respect, it is of importance also to secure a sufficient variety, and, in addition to the ordinary staple articles of atta, rice, dhall, ghee, and condiments, such valuable additions to diet, as goats, fowls, and vegetables, should not be omitted.

Food.

8. Good and pure drinking water is of hardly less consequence than good food. Well water is generally to be preferred as being more free from impurities. The wells should be sunk in such a situation as will prevent their being contaminated by sewage. They should be reserved for supplying drinking water, and no person should be allowed to bathe over or even near them. Where the water is drawn from tanks, similar precuations should be adopted. The tank should be kept for supplying drinking water, and on persons should be allowed to wash either their bodies or their clothes in it.

Water.

9. General cleanliness of the lines and their vicinity should be enforced. As the encampment will probably be constantly moving with the progress of the works, it does not appear advisable to establish regular latrines. Under the circumstances, the trench system is most suitable. Every morning one or more fresh trenches should be dug, according to the number of people to be provided for. They should not be deeper than 18 inches, and should be covered in daily. In selecting a place for these trenches, it is indispensable that they should be removed, as far as possible, consistent with convenience, from the water-supply. The system has no other danger than contamination of the water, and it can be effectively carried out at very little expense.

Conservancy.

10. The precautions noted under these different headings, if carefully attended to, are calculated to secure the health of the people employed. It is now necessary to consider what measures should be adopted in the event of sickness appearing among them.

11. Wherever any large body of coolies is collected together, it will be advisable to appoint a Native Doctor, and provide a small hospital. In most cases, a central establishment will be sufficient for several miles of works. The hospital should be reserved for treating accidents and cases of a trifling nature, in which complete recovery may be soon expected. As a rule, it will be better to transfer the sick suffering from more severe illness to the neighbouring station where they can be looked after in the dispensary.

Appointment of Native Doctors.

12. These remarks apply more particularly to ordinary cases of sickness. Those diseases which are liable to become epidemic require separate attention. Under this head there are only three which need be considered. They are small-pox, cholera, and contagious fever.

13. Small-pox is rarely epidemic among adult natives. On the appearance of any case, no matter how slight, the patient should at once be removed to a small-pox hospital, if one exists in the neighbouring station; if there is no special hospital for the reception of such cases, the sick man must be isolated in a separate hut, well removed from the rest of the people, and all communication between it and the camp must, as far as possible, be cut off. On his becoming convalescent, he should be provided with new clothes, and sent to his home; on convalescence or death, his clothing and all other infected articles ought to be destroyed.

Small-pox.

14. The occurrence of a case of cholera has a different significance according to the part of the country and the particular time of year at which it occurs. Under any circumstances, however, the appearance of even one case of the disease should not be lightly thought of. The care taken in the conservancy arrangements should be redoubled; the patient should be isolated, and his discharges disinfected. Cholera pills should be freely distributed, so that cases of diarrhœa may be treated without delay. If the disease becomes epidemic, that portion of the encampment which has been attacked should be removed without delay, and if the attack has not been limited to any particular locality, it will be advisable to remove the whole of the people elsewhere. A move of even one or two miles often suffices.

Cholera.

15. Contagious fever in the Upper Provinces ought not to be lost sight of. Great and rapid prostration, attended with jaundice, ought always to excite suspicion and call for great care. On the occurrence of such a case, the patient should at once be isolated, and every precaution taken by preventing communication with the sick persons, and by the use of disinfectants to prevent its spread. On the appearance of any contagious fever, a change of ground for the whole body of the workmen is very desirable.

Contagious fever.

16. The question of medical supervision has already been incidentally alluded to. It will be advisable, as has been already stated, that a Native Doctor, with a small hospital, should be attached to each large gang, or set of gangs, of work-people. It is also necessary that he should be under supervision. Whenever circumstances admit of

Superior medical supervision.

it, the camp should be frequently visited by the Civil Surgeon of the District. Even when distant from his head-quarters, it is very desirable that he should pay at least one visit in the month to ascertain that the Native Doctor is carrying on his duties properly, and also to satisfy himself that the sanitary arrangements are good. A weekly report should be submitted by the Native Doctor to the Civil Surgeon. He would thus be informed of what was going on, and on the occurrence of any emergency, his services would always be available when called for by the Engineer in charge.

Responsibility of Superintending Engineers.

17. It is the duty of Superintending Engineers to see that the general orders on the subject of health are duly carried out.

Outlay on sanitary arrangements.

18. Any reasonable outlay for such temporary cover as may be needed for bodies of work-people of considerable magnitude, and the marking out, clearing, and draining of their temporary stations; also for entertaining some small temporary establishment to look after the latrines, one or two policemen and hospital establishments may be authorized by local Governments and Administrations, as forming part of the contingent outlay on the work under execution.

RELIEF WORKS GENERALLY AND ESPECIALLY FOR ABLE-BODIED LABOURERS.

(Full Labour Gangs.)

"*If famine can be anticipated, it may in a great degree be forestalled by the judicious provision of public labour, and when it has actually appeared in the form which we have indicated, measures of direct relief must be taken. When relief has commenced, the skill and intelligence of local officers must always be again tried to the utmost. The conduct of the measures required in famine seems in all parts of the world to involve a constant nice steering between Scyllas and Charybdes of a character many times repeated. If special relief works are commenced too early, the ordinary labour market is disturbed without necessity; if too late, this most legitimate of all modes of relief becomes, as we have said, nearly useless. If daily pay be too freely given, the people of all countries when employed for charity will struggle to do next to nothing. If task-work is rigidly enforced, without the means of making it practicable to all, the object of relief may be defeated. If task-rates are too hard, they are injurious; if easy in the extreme, it is probably impossible to vary such rates according to the capacity of individuals, and the stronger labourers are enable to earn far too easy gains, from which it is difficult to wean them. We cannot say that any one system should be followed under all circumstances. Everything must depend on individual skill and discretion.*"—(ORISSA ENQUIRY COMMISSIONERS' REPORT, PART III, PARA. 83.)

RELIEF WORKS GENERALLY.

Contracts en masse *versus* individual payments.

(From Mr. Henvey's Memoir, pp. 129—131.)

If it be agreed that, notwithstanding any possible extension of irrigation works or perfection of communications, seasons of exceptional drought are likely to throw upon the hands of Government large numbers of the labouring people, the next question is as to the best measures of relief. Until the discussion with the Ajmere authorities arose, it had been generally allowed that famine works should be conducted by special and direct agency. At page 173, Vol. I, of their report, the Orissa Famine Commissioners wrote :—

Remarks of the Orissa Famine Commissioners on the uselessness of the contract system.

"It is most amply shown by experience that the moment there is anything approaching to general famine—the moment, in fact, that serious want is at all widespread—public works conducted in the ordinary manner by contract at ordinary task rates are quite inappropriate and unavailing."

The arguments urged by the advocates of the contract, as opposed to the direct or departmental system of labour relief, may be divided into two classes, special and general. The special argument is that where the supervising agency is limited, and the number of labourers is large, it is impossible to secure due control and efficiency. This is a question of degree. If the number of trustworthy officers is so small that no check can be exercised over the administration of relief, attempts at direct operations must be abandoned. Again, it cannot be denied that very frequently works undertaken in a hurry for famine purposes are wasteful, and sometimes altogether unremunerative. The Lullutpore tanks were certainly the one, and perhaps the other. Numerous instances of the extravagant cost of special works have been given in the course of the district narratives. The comparative valuelessness of famine labour is admitted.

Arguments urged in support of the system.

Valuelessness of famine labour.

"Experience has shown," says Mr. J. S. Mill,* "the sort of work to be expected from recipients of public charity. When the pay is not given for the sake of the work, but the work for the sake of the pay, inefficiency is a matter of certainty."

Or, to turn from the philosopher to the practical engineer, and compare the opinion of the late Colonel Baird Smith.

Colonel Baird Smith's views on the subject.

"Profit on labour that is not wanted, but is a mere drug in the market, is wholly out of the question. It is, in a pecuniary sense

* Political Economy, Book II, Chapter XII, Section 2.

even, at least a very expensive method of working, for the average capacity of the workers is much below that of ordinary labourers, and the cost of work so executed must always be high. But no middle course exists between employing the people and maintaining them; they certainly cannot support themselves, and it is better far to accept the high rates of work consequent on their employment than to let them subside into the class of helpless poor, or die. At best it (the system of labour relief) will never be an economical one. It, however, returns in labour a sensible proportion of the cost of maintaining the people, and, what is perhaps of more importance, it teaches them to continue reliance on their own capacity to work as their best means of subsistence, and maintains their self-respect by keeping them above the position of the helpless paupers."

The object of Government is to save life and to avert demoralization.

In these last few sentences lies the root of the matter. The object of Government is *not* to support paupers at least expense to itself, but while saving life to avert demoralization, and it is held that these two ends can only be secured by the direct system of operations.

The exclusion of weakly labourers advocated by some.

The most weighty arguments, however, are those which are meant to prove that, speaking generally, the contract is preferable to the direct system. In these arguments it is tacitly allowed that the tendency of a contract system is to exclude infirm and weakly labourers. The exclusion has been sought to be justified on the following grounds. That it is questionable whether work should be demanded from the feeble in times of famine, such people require nursing, and not labour; their constitutions are impaired by starvation, and few even of those temporarily relieved survive the disastrous effects of the famine. The support of the feeble poor saves few and diminishes the stock available for the able-bodied and partially feeble. The able-bodied are the thews and sinews of the State, and should be preserved still more than the infirm. Relief works are of more value when they give employment to the able-bodied than when they are permitted to degenerate into mere feeding-places. Famine works should, therefore, be devoted exclusively to providing labour for the able-bodied and comparatively feeble, and the weak should be regarded as fitting recipients of pure charity.

View of the Government of the North-Western Provinces, that all lives must be saved.

The Government of the North-Western Provinces arrived at a different conclusion. It started with the declaration that lives must be saved. No utilitarian distinction was drawn between the value to the State of the young and strong as compared with the old and feeble. All were to be rescued from starvation by every means possible to human skill and foresight. Subordinate to this grand object were two considerations: first, that the outlay of public money on the preservation of life should be economical, and second, that relief should be given in such a way as to produce as little demoralization as possible among the recipients, with as thorough a sifting of the needy as the circumstances admitted. Now, it is contended that contract work is insufficient to avert starvation. The contractors will not employ those who are unable to give adequate return for their wages, and

Contract system ineffectual to save life.

practically rejection of applicants cannot be prevented. On the other hand, the wages given to the able-bodied afford no more than a bare subsistence for themselves. What, then, under such a system, becomes of the aged and tender; the old men, women, and children—the families of those able-bodied men whom the contractors are employing? They must die, or go to the poor-house, or be employed on some other principle. But to let them die is out of the question.

For then what becomes of the infirm and feeble?

It is held that, unless incapable of work, people ought not to receive gratuitous relief. This was the rule observed in our poor-houses [N. W. P., 1869.] Exaction of work acts as a check on pauperism, and is the only practical test of real want. It may, perhaps, be replied that suitable work can be enforced *in the poor-houses*. This is true; and where the numbers are so small as to be easily manageable; when there are means of directing the work successfully, and markets for the sale of the produce; and lastly, when the classes needing relief are more fit for manual and sedentary work, such a system may be at once the most efficient and economical. But it is clear that there must be a combination of all the above circumstances to ensure a satisfactory result. If the numbers of the poor are counted by thousands, in-door work could only be carried on in large Government manufactories supervised by a staff of inspecting and controlling agency, and utterly unsuited to the temporary exigencies of a time of famine. Again, if there are no markets for the sale of produce, the State may be a greater loser by the in-door employment of the poor, than if no work at all were done; for, besides the cost of food, there would be the expenditure on raw material. Something of this kind actually happened at Beaur in Mhairwarra, where the jail products could find no buyers, and the articles manufactured in the poor-houses were a dead loss. Lastly, if the classes applying for relief are those who, in ordinary times, obtain employment in the fields, to demand from them manual work in a poor-house would be unprofitable; far more so than to collect weavers on a district road, or an embankment, for most people, whatever their trade, can wield a spade or carry a basket, whereas training and practice are required for spinning and weaving. One more consideration may be mentioned. The people were most reluctant to leave the neighbourhood of their homes. They would often sooner die than crawl to the poor-house at the head-quarters of the pergunnah. This reluctance was intensified when one member of a family was receiving employment on a local work: the women and children would naturally remain near the head of a family. Mr. H. G. Ross (then Officiating Collector of Bijnour, and one of the most careful administrators of relief operations) observed that a family often possessed but one blanket; and if the members were separated, those unfortunates who lost the blanket ran the risk of perishing by cold! A line of road running through the centre of a famishing population gives general opportunities of relief to villages situated within a moderate distance of the work. On the other hand, poor-houses cannot be established everywhere; they must usually be opened

Circumstances under which employment within the poor-houses may be suitably given.

Reluctance of the people to leave their homes.

at the head-quarters of a revenue sub-division, or at other centres where there is proper agency at command. Such centres may be 15 or 20 miles from a famishing village; and if no work is offered near that village, but one on which the able-bodied alone find employment, it is apprehended that many persons must starve.*

Arrangements approved in the North-West Provinces.

Accordingly, the arrangements approved in the North-West Provinces were as follows:—Poor-houses were established at central and convenient points. District works were undertaken on lines considered useful and accessible to the starving population. Where circumstances permitted, large public works were started, and gangs collected from adjacent districts were sent thither and employed until the scarcity passed away. The poor-houses were thus far open to all, that no applicants went away without a meal. Those deemed capable of labour were drafted off, either to the district or central works. There remained the infirm and helpless. These received food until they recovered strength, when they were sent off to the works or employed on some light and suitable in-door occupation. The district works gave employment to those who were unwilling or unable, for one reason or another, to go to the central works. At the same time, the wages were carefully regulated so as to induce the greatest possible number to resort to the points where labour was most needed and supervision most effective. As prosperity revived, actual need was rigidly tested by periodical reduction of wages; care, however, being taken that payments should not be less than would obtain a bare subsistence. Thus the poor-houses served as feeders to the district works, and the latter to the central works. At each point there was a check on pauperism: at the poor-houses by enforced residence and exaction of work from those able; at the district works by the regulation of payments to the lowest limit compatible with preservation of life; at the central works by the exaction of full work, and by the natural reluctance of the labourers to remain away from home longer than need be. If these arrangements involved the State in expense, that result was inevitable under any system, and it must at least be conceded that many lives were spared, at the same time that professional beggary and pauperism were effectually discouraged.

Method of restricting numbers on district works.

Checks on pauperism maintained at three points—1*st* the poor-houses with gratuitous relief; 2*nd*, the light-labour works with partially gratuitous relief; 3*rd*, the full labour works without gratuitous relief.

Expense inevitable, but lives were saved.

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* There is a passage in the introductory chapter to the Administration Report of the North-Western Provinces for 1868-69, paragraph 45, which bears upon this subject:—"Relief works to be really sufficient must, in part at least, be provided on the spot. A portion of the population will generally be prepared to proceed to some distance for suitable labour; and for these it is unquestionably expedient to provide works, as suggested by the Government of India, in localities where the supply of food is cheap and plentiful. But experience too plainly proves that vast numbers will not avail themselves of any distant sphere of labour; they will rather die at their homes than emigrate, and for these, especially for the women and children, and the men of the families who prefer remaining with them, work must be provided at near and convenient localities. Under this principle, while large works have been amply provided by the Public Works Department, and conducted for the most part with admirable tact and zeal by its officers, smaller works have also been opened every here and there, as necessity required, in the afflicted districts under the immediate charge of the local officers."

Payments to labourers should be made in money, food being separately imported, if necessary.

(From Mr. Henvey's Memoir.)

There are a few other points which seem worthy of discussion. First, with reference to wages on relief works. The course of events in Ajmere seemed to the Deputy Commissioner to show that there could be no fixed scale: it must vary from time to time with the price of grain; and therefore, whether the works be carried out departmentally or by contract, it would be best to make daily payments in grain at a fixed minimum scale for a fair amount of work, all extra work being paid for by the *piece*. The Deputy Commissioner illustrates his position by referring to the scale of wages in the Ajmere Public Works proper. He says that when the cost of feeding a prisoner was 3 annas 10 pies, and jail rations were 14 chittacks or 28oz., 2 annas per diem was the maximum scale on the relief works conducted by the Department of Public Works. Looking to the difficulty of obtaining food at all, even for cash, the 2 annas are held to have been only equivalent to 7 chittacks or 14oz. of grain, which, for a working-man, would not be even a subsistence.

Ajmere:—Captain Repton's views regarding payment of wages.

It may be admitted that the scale of money wages should bear close relation to the price of food. If 1½ anna will not buy sufficient grain to support a labouring-man, the rate must be raised. It is also undeniable that where the circumstances are so exceptional as in Ajmere, and food is not procurable for money, the State must intervene and distribute rations. But Captain Repton's conclusions cannot be accepted as generally applicable to all cases of labour relief. Payment of wages in money is the most convenient and economical arrangement. In the first place, as has been observed by Mr. H. G. Ross, the poor people can make better bargains for themselves than Government can for them. They can buy more or more suitable food for an anna or two than Government can supply. If further authority is required, Colonel Baird Smith's opinion was strongly opposed to payments in grain:—

Wages should vary with prices.

Payment in money generally most convenient.

"I believe it will be found," he wrote, "perfectly safe in this country to give to every able-bodied man and to every woman and child capable of working a money-wage in exchange for their labour. They are not exposed to the temptation that made money-wages ineffective during the Irish* famine. * * * Private enterprise may safely be relied on for the provision exactly suited to the tastes of the people, and what Government has to do is to supply money in exchange for labour to purchase enough of this food to sustain life in vigour for continous work."

* This is not the only difference between the results of experience in the great Irish famine and those of famines in India. In Ireland it was found that the pretence of labour on the public works was a most powerful demoralizing agent: more so even than gratuitous distribution of food. Men were so content to idle on the works that private employers could not obtain labourers. Hence the withdrawal of public works in the spring of 1847, and the substitution of the system under the Act of Parliament, 10 Vic., Chapter 7. Now the reverse of this was the case in 1868-69. The people only came to the works when they could get no other employment; and, as soon as rain fell and agricultural operations were resumed, they left in large numbers.

Instance of inconvenience of payment in food.

In paragraph 23, Section 1, of the Famine Report of 1860-61, an example is quoted of one of the relief works on which labour was at first paid for in flour, uncooked; and the result was such a system of rude barter that it was found necessary to substitute money-wages.

"Men had to buy fuel with a little flour, salt with a little more, and so on with other petty purchases; and the small merchants, who are always the most convenient channels for such transactions, were put to so much inconvenience by these barterings that they refused to work."

Payments in food comparatively costly.

Then the supervision necessary to secure proper purchase of supplies and honest distribution of the doles must be incomparably more costly than the arrangements required for payments in money. Payments in grain may be usefully introduced when the numbers are small, and the *object is to test the severity of distress*; but they need not,

When payments in grain may be usefully introduced.

and should not, be generally applied simply because the price of food may rise above an approved scale of wages. Practical experience, as in Bijnour, proves that wages can be raised and lowered according to circumstances with the best possible results as regards the number of applicants for relief, and without any disastrous consequences.

WAGES IN GRAIN.

Rules for the conduct of sales of rice to the labourers employed by the Public Works Department in Orissa, 1867.

[*Note.—These rules hardly came into operation in Orissa in* 1867. *The supply of grain was afterwards found sufficient, and no necessity arose for limiting sales to retail quantities or for particular classes.*—J. G.]

1*st*.—The Department of Public Works are to state the line of work where shops for the sale of grain to their labourers are required, the localities in which the shops are to be situated, and the probable daily or monthly quantity to be disbursed at each shop.

2*nd*.—The Department of Public Works are to give certificates every ten days to their contractors for works measured, stating the amount due to the contractor, amount paid in money, and amount to be given in grain at the rate of twelve seers the rupee, according to tickets.

3*rd*.—These tickets are to be printed off by the Department of Public Works, with consecutive numbers; each ticket to be for twelve seers, equal in value to one rupee.

4*th*.—On shewing his certificate to the moodi in charge of the shop, the moodi will weigh over the amount of rice covered by the number of the tickets, either to the contractor or to the labourers to whom the contractor may make over the tickets, and the moodi will secure, and carefully retain, the said tickets, in exchange for the rice weighed out.

5th.—The moodi will enter the disbursement in his daily cash accounts, with date, noting on the opposite side the numbers of the tickets received in exchange, and he will fortnightly send to the Collector's Office his account, shewing total amount expended and balance of stock in hand. The amount expended must be covered by the tickets sent in, and for any difference the moodi will have to pay.

6th.—These tickets will then be nicked like a railway ticket in the Collector's Office, and forwarded to the Department of Public Works; and a cheque on the Collector must be given in return by the Department of Public Works, the amount of which will be credited to the "Importation Fund," and the accounts properly adjusted.

7th.—With his fortnightly despatch of tickets to the office, the moodi should forward an indent for any further stock required to the Collector, who will give the necessary orders for the delivery of the full quantity, or such part as he may think proper, from the nearest sale golah, and for its despatch, either by the moodi, should he contract for the transport, or by some other agent or contractor for transport. The Collector's order will be retained as the sale depôt Superintendent's voucher.

8th.—The moodies are to be paid such a monthly salary on such security as the Commissioner may think fit.

TABLE shewing EVEN quantities of RICE and EVEN sums of WAGE WITHOUT FRACTIONS (Rice taken at 12 seers per rupee).

It is difficult to divide the maund into seers at prices not involving the fractional part of a pie if sold at the rate of Rs. 3-4 per maund; but if the rate be fixed at Rs. 3-5-4 per maund, it admits of the easy division of the maund into seers, and would give twelve seers of rice for the rupee.

A labourer's daily wages being calculated at three annas per day, he would, therefore, after purchasing two seers at two annas eight pie, have four pie left for the purchase of salt, and for other expenses, so that, practically, the orders of Government would be carried out by the adoption of this rate.

				Rs.	A.	P.
1	seer	will	cost	0	1	4
2	seers	,,	,, ...	0	2	8
3	,,	,,	,, ...	0	4	0
4	,,	,,	,, ...	0	5	4
5	,,	,,	,, ...	0	6	8
6	,,	,,	,, ...	0	8	0
7	,,	,,	,, ...	0	9	4
8	,,	,,	,, ...	0	10	8
9	,,	,,	,, ...	0	12	0
10	,,	,,	,, ...	0	13	4
12	,,	,,	,, ...	1	0	0
20	,,	,,	,, ...	1	10	8
30	,,	,,	,, ...	2	8	0

The System of Daily Wage without Task-work.

(N. W. Provinces, 1860-61.—Colonel Baird Smith.)

For the relief of the able-bodied poor, a series of "special relief works" have been organized, both in the North-Western Provinces and the Punjab, on principles much the same, but with details varying according to locality and other circumstances.

The primary condition of admission on these works is, that applicants shall not be so helpless as to be unfit for ordinary labour in digging, carrying, and the like. If they are so helpless, they properly fall under charge of the agents for relief of the helpless poor, but they would be improperly placed on special relief works. Some confusion of thought is apt to arise on this point, and it is well to notice it. Officers in charge of special relief works find men, women, and children reach them so grievously exhausted as to be utterly useless for some time afterwards. It is of course essential that these poor creatures should have all needful help, and should not be sent away. But the means of helping them should be provided from the funds supplied for the helpless, and not from those provided for the able-bodied poor. No officer having to deal with such a case would ever find the slightest difficulty in procuring the means of supporting them till they were fit for work, either from the district or central Committees. It is only an act of justice towards Government to meet such a demand, inasmuch as Government has liberally subscribed towards the sustenance of the helpless by doubling all private subscriptions, and ought not to be again taxed for the same class by having to pay for them on special relief work also.

All people then willing to give labour in exchange for wages are admitted on these works. The wages given are calculated at the lowest rate needful for subsistence, and for that only. Profit on labour that is not wanted, but is a mere drug in the market, is wholly out of the question. It is, in a pecuniary sense even, at least a very expensive method of working, for the average capacity of the workers is much below that of ordinary labourers, and the cost of work so executed must always be high. But no middle course exists between employing those people and maintaining them. They certainly cannot support themselves, and it is better far to accept the high rates of work consequent on their employment than to let them subside into the class of helpless poor or die. It is clear that on special relief works no specific rates can possibly be fixed. They must range from very nearly the entire cost of subsistence to the rates due for ordinary labour, according to the comparative working capacity of the people employed, and may at any time show fluctuations dependent on this capacity alone, and thus be wholly beyond the control of the officer in charge. Some officers have tried to work within limiting rates, but it is only practicable to do so systematically by overlooking the fact, that wages on special relief works are subsistence wages only, and cannot be retrenched for short work without starving the work-people. It is remarkable, however, how well and cheaply amid all the difficulties of the case, an energetic officer can execute special relief works. But this comparatively satisfactory result cannot be obtained by reducing wages. It depends on close personal supervision, on the careful adjustment of tasks to strength, in

the formation of working parties, so that the strong and the weak may each have just the kind or quantity of work they are best fitted to do. In this way the best may be made of the system, but at best it will never be an economical one. It, however, returns in labour a sensible proportion of the cost of maintaining the people, and what is perhaps of more importance, it teaches them to continue reliance on their own capacity to work as their best means of subsistence, and maintains their self-respect by keeping them above the position of helpless paupers.

The wages allowed are 1½ annas, or about 2¼*d.* for each man, 1 anna, 1½*d.*, for each woman, and half an anna, ¾*d.*, for each child. A man, his wife, and three children can thus earn four annas or about six-pence a day, on which the whole party can so subsist as to have their capacity to work fairly maintained. The same can be done on each separate wage, though of course family groups fare best.

The work-people are ordinarily organized in gangs of 500 each, to which a separate cash-keeper and series of petty officers are attached. They live usually in light sheds on the works; have grain shops moveable with them; occasionally, as on the hill road through the Sub-Himmalayas, where 17,000 or 18,000 people are gathered into one place, officers of the civil department reside on the spot to maintain order, ensure supplies, and the like, while the engineers attend to the works only. On one of the relief works payment for labour was at first made in flour uncooked; but this soon brought on such a system of rude barter that it was wisely abandoned, and a subsistence money-wage substituted. Men had to buy fuel with a little flour, salt with a little more, and so on with other petty purchases, and the small merchants, who are always the most convenient channels for such transactions, were put to so much inconvenience by these barterings that they refuse to work. The less our systems of relief derange the ordinary machinery of society, and the more they can be made to dovetail themselves into it, so to speak, the better they will always be found to work.

The chief "Special Relief Works" authorised are the following:—

	Approximate number of people daily employed.
The road from Roorkee to Deyrah crossing the Sub-Himmalayas	18,000
The road from Haupper to Gurmuktesur ...	7,500
The Hindun River diversion	4,000
The Futtehghur branch of the Ganges Canal ...	6,000
The Boolundshuhur branch of the Ganges Canal...	4,000
Works at Agra	18,000
Road from Shekoabad	4,000
Irrigation works near Agra	2,000
Works at Delhi	15,000
Works in Delhi District	15,000
Road from Delhi to Muttra	8,000
Irrigation works in Goorgaon	5,000
Works in Rohtuk	3,000
Works in Hansi	4,000
Works in Hissar	3,000

	Approximate number of people daily employed.
Various petty works in districts of the North-Western Provinces, some rather large, some small, averaging, say 1,500 per district	16,500
Ditto ditto in the Punjab ...	10,500
Grand total employed daily on all kinds of special relief works ...	143,500

I have given these numbers only from general information, not from the accounts; but the result is, I believe, approximately correct.

In reviewing this plan of relief, I am satisfied that it has proved a most healthy and satisfactory success. The worst parts of the famine tract have been traversed by long lines of works, or by smaller detached works to which the suffering people have freely resorted. They have left them, too, whenever the ordinary farming work of the country required their presence. The effect produced on all the working parties by the call for labour to cut the spring harvest was most marked. About the half number left; and having been absent about a fortnight or three weeks, they began again to return, and very soon restored the previous strength of the parties. There was thus a healthy sympathy between the working of the plan and the general wants of the country. No real inconvenience was caused by the withdrawal of so much labour, as such proportion of it as was wanted by the farmers spontaneously met their call, and was only employed by Government when there was no employment for it elsewhere.

The pecuniary burden has, however, been a heavy one on the State. It is estimated that the entire cost of special relief works, great and small, throughout both provinces, will not be less than about 250,000*l.*

The ordinary operations of the different departments employed in executing public works throughout the famine tract have supplied an additional means of relief, of which the influence has been extensive. Labour being paid for there on the usual terms, they are resorted to only by work-people capable of full work, and they thus form the final link in the chain of relief. The relief-house paupers, when sufficiently restored to be fit for out-door labour, are drafted off to special relief works, and when still further restored, so as to be fit for full work, they may earn full wages by passing off to one or other of the ordinary public works of the country. The East Indian Railway, which passes right through the heart of the worst part of the central section of the famine tract, and the numerous channels under construction by the Irrigation Department, are the most prominent and most useful of these works. It is difficult to estimate their entire effect, but it will not be far wrong to say that they give daily employment in all parts of the suffering districts to between 40,000 and 50,000 people.

THE CONTRACT SYSTEM.

Contracts en-masse *versus* Individual payments.

(RAJPOOTANA, 1868-69.—COL. BROOKE, GOVERNOR-GENERAL'S AGENT.)

Should famine relief works be carried on by contract or by individual payments?

Another important question gave rise to much discussion during the progress of the famine. Many objected to relief works being performed by contract labour, in place of by departmental labour.* It was said that the contractors rejected the poor and feeble; and that, though an allowance was made to them by the Public Works Department to cover the loss, they were supposed to sustain by the employment of inefficient labourers, yet that they only employed the able-bodied, and appropriated the allowance made. All the extra payments, however, were made, not upon the statements of the contractors, but upon measurements of the work. An enquiry took place, and the department were exonerated from blame. It is possible there may have been some truth in the statements. The term able-bodied during the famine could only be used in a comparative sense. The able-bodied had frequently families to support, and the proceeds from their labour had generally to be divided amongst its members, so that the best-paid men did not partake of enough food to keep their bodies in vigor. Even the sepoys of the Mhairwarra battalion were reported by their medical officer to be in a debilitated state, in consequence of insufficiency of food from this very cause, and it cannot be regarded as surprising if daily labourers were in the same condition. The contractors may have been perfectly right, when they gave the name of feeble to such men. Those called really feeble at such a time could not work at all, and frequently died on attempting the exertion of lifting a mattock.

Apart from this, however, the requisite number of supervisors were not available to overlook such extensive and such numerous works, had they been constructed by departmental labour. The payment alone of such vast numbers, as were daily employed, would have required a large staff of tellers and auditors. Colonel Keatinge, Governor-General's Agent in Rajputana, was very anxious to obtain volunteers to supervise works constructed departmentally, and pressed * * * [who had remonstrated against the contract system] to undertake the duty. He offered them 50 per cent. margin above the price paid to contractors, to insure them against loss, so long as it might be the means of affording relief to the suffering poor. Only one gentleman would undertake the duty, and eight miles of a famine relief road was made over to him, with an appropriation of Rs. 20,000. But keeping the accounts and working departmentally entailed so much labour and difficulty, that in eight months this gentleman had only spent Rs. 2,800 upon the road, and the relief afforded was consequently very small. In this case, the departmental system failed. By the contract system, labour and food were being administered to thousands, and though now and then there may have been

[* Departmental labour, *i.e.*, in which the department reckons separately with each individual labourer.]

irregularities by grasping contractors, yet it was not the rule. The works were closely supervised by executive officers, who were most energetic during the famine, in relieving distress, and narrowly watching the action of the contractors. The very fact of poor-houses having been established by the Public Works Department at the works themselves shows how many of the really feeble flocked to them.

Broad distinction between famine relief works and charitable relief.

Whenever famine labour has been exacted from the feeble poor in return for food, it has been always very unremunerative. During the Rajpootana famine, a loss of 70 to 80 per cent. of the outlay was not unusual, so that nothing was gained to the State by this species of relief to those whose hunger had merged into starvation, whereas the labour which maintained the comparatively able, gave the district the most valuable communications in every direction, and was actually more serviceable in maintaining human life than any other kind of relief. Not only should we sustain the very feeble and infirm, but we ought, in an economical point of view, still more to preserve those who are the thews and sinews of the State. Without relief they also would have starved. The famine relief works, therefore, are of more value when they give employment to the able-bodied, and a proportionate benefit to the public, than when they are permitted to degenerate into feeding places, where those who are too weak and sickly to work can obtain charitable grants of food. It seems proper that this broad distinction which has been frequently enunciated, I believe by Government, should be preserved in giving relief during all famines, *viz.*, that famine relief works should be devoted exclusively for providing labour for the able-bodied and comparatively able, and that the very weak and feeble should be regarded as fit recipients for charitable relief only. At Ajmere there was disappointment that famine relief works did not fulfil both objects.

Selected examples of relief works carried on by D. P. W., with labourers both able-bodied and infirm.—N. W., Provinces, 1869.

(From Mr. Henvey's Memoir.)

Eastern Ganges on Ramgunga Doab Canal.

The work when and why undertaken.

The design of this canal, which is to be taken out of the Ganges at Shampore, sixteen miles below Hurdwar, is to provide for the irrigation of the Bijnour, Moradabad, and Budaon districts. The situation of the work was convenient for the poor of Bijnour, and when, after the harvesting of the spring crops of 1869, it was found that the number of applicants for employment in that district was rapidly increasing, it was determined to undertake the excavation of the canal, and to transfer to the work all the labourers of Bijnour who could be persuaded, or compelled by reduction of wages on the local works, to go thither. Accordingly, a portion of about twenty miles was chosen at a point where the line of the canal crosses the high road from Gurhmooktesur to Moradabad, and this point was selected because it was easily accessible to Bijnour, and at the same time sufficiently far to form a test of real

need. Rujubpore, the head-quarters of operations, was also conveniently situated for the purchase of supplies from Moradabad.

Arrival of work-people.

By the 20th May, all preparation for the shelter and sanitary arrangement of the workmen had been concluded, and gangs from Bijnour began to arrive. From the 20th May to the 20th October, the following daily numbers were employed:—

May	...	...	...	289
June	...	...	...	5,000
July	...	...	...	6,075
August	...	...	...	6,946
September	...	...	...	6,435
October	...	...	...	179
				4,985

Cost of the work.

And the cost was Rs. 80,341-2-6, or at the rate of Rs. 16 per head of the daily average, *i.e.*, Rs. 3·33 per month for five months. The estimated cost of the work was Rs. 60,504. The difference between this estimate and the actual cost, Rs. 19,837-2-6, represents the sacrifice involved in the employment of famine labourers. This sum has been again sub-divided into—

				Rs.	A.	P.
Infirmary	...	...	...	893	7	6
Hutting	...	...	...	8,216	11	10
Miscellaneous	...	...	...	1,910	12	10
Loss by labour		...	...	8,836	2	4
		Total	...	19,857	2	6

The heavy cost of hutting is noticeable; and this charge must always be taken into consideration in deciding between large central public works and local works near the homes of the people; but the main point to be observed is, that the cost of carrying out these operations under direct supervision of the departmental officers was only 32 per cent. in excess of the usual rates. A daily average of 4,985 people for five months cost Rs. 19,857-2-6, or Rs. 4 per head, *i. e.*, 13 annas per head per month. At the commencement of operations the people showed a great disinclination to stay, though the wages—men 1½ anna, women 1 anna, children ¾ and ½ anna—were more than they could obtain at Bijnour. A comparison of the numbers at the work on the 31st May, 2,259, with the total numbers of arrivals in the month, 2,894, proves that about 21 per cent. had deserted in ten days.

The work-people desert at first.

In the first half of June the arrivals were very few, while towards the end of the same month the average rose to 236 daily. The change may be attributed partly to the growing conviction in the minds of the people that they were to be kindly and fairly treated, and partly to the increasing pressure applied by the Collector of Bijnour to drive the people away from his

local works. During the month only 630 deserted, a less number than in the ten last days of May. In July, there was a large accession, 4,592; but also a great number of deserters, 4,058. These latter are divided in the official report into—(1) Field-labourers who, owing to commencement of the monsoon, returned to agriculture; (2) those who had saved enough to subsist; (3) those who came to the works expecting high wages and little work. Among the third class are included people from Budaon, 1,000 of whom never went to work at all, and others deserted after a few days. There was also a perceptible falling-off in the number of applicants in July; the average of arrivals fell in the last ten days to 108 from 206 at the beginning of the month. In August 5,009 people came from Bijnour and 515 from Moradabad, while 3,120 deserted. The numbers arriving from Bijnour were very high towards the end of the month, *viz.*, 478 on 14th, 491 on 16th, and 774 on 20th, but the number of arrivals on the last day of the month was only 5.

Diminution of numbers in the autumn.

In September, the average was very high, the actual number on the first day being 8,728. The arrivals were 310, and on the 30th only 2,463 were present; 6,575 therefore left the work, doubtless in consequence of the greatly improved prospects near their own homes. On the 2nd October the numbers were reduced to 1,965, and soon after a proclamation was issued that the work would be closed within 10 days. When the works were finally closed on the 20th October, the number were 1,122, and no new arrivals had come in during the month.

Proportion of men, women, and children.

The following table gives the proportions of men, women, and children among the monthly arrivals:—

Month.	Total arrivals.	Men.	Women.	Children.
May	2,894	47	34	19
June...	3,680	41	38	21
July	4,592	43	37	20
August	5,524	42	34	24

From the above it will be seen that the proportions were much the same throughout the four months. The men preponderated; whereas on the local works in Bijnour district, the men formed only one-fourth of the number employed. The obvious reason is that it was upon the men that pressure was brought to bear by the Bijnour authorities to induce them to leave the local works. And probably the women and children at Rujubpore were mostly members of the families of the men who were thus transferred.

Sanitary arrangements.

Sanitary arrangements were very good. The hospitals were carefully looked after, and goats were provided to suckle infants whose mothers were too exhausted or too old to support them. Mortality and sickness were low. In May one death occurred—a starving child who had not been brought to hospital.

For the following months, the average of sick and numbers of deaths were—

Month.	Daily strength.	Daily sick.	Proportion of sick per 1,000.	Deaths.	Proportion of deaths per 1,000.
June	5,000	30	6·	8	1·6
July	6,075	46	7·57	10	1·6
August	6,946	69	9·09	8	1·1
September ...	6,435	72	11·18	19	2·9

Description of people who applied for work.

The greater number of deaths in September is ascribed to the prevalence of heavy rains.

The following interesting particulars are given in the official report regarding the class and habits of the applicants for employment :—

"Fully nine-tenths of the people came from the Bijnour district, principally from the neighbourhood of large towns; the rest were from the Moradabad and Budaon districts.

"As regards caste, most were Julais,* Cheepees,† or Chumars;‡ by far the greatest number were Julais. There were very few cultivators of land. The numbers in a family varied from a single man to upwards of a dozen, including children. The families generally numbered five or six.

"They remained on the works from six weeks or two months generally, but many stayed much longer. Several hundreds of those who came the first day the work was opened, only left it on the day it was closed.

"The *tyndel's* gangs were, as far as possible, arranged by villages, a certain number of huts being assigned to each gang; they occupied the huts according to caste and families. The amount of food they ate naturally varied with their circumstances and dispositions. Men with large families would, perhaps, have to be content with 5 chittacks per day, while men without encumbrances would either save an anna or five pice per day, or spend their two annas every day with a full meal. They would sometimes buy a blanket when they had saved sufficient. In the majority of cases, as far as could be ascertained, they did not leave the work without rupee or two about them. A good many saved money from the beginning, and left for their homes at the end of August and beginning of September with four to seven rupees to enable them to tide over the interval before the cutting of the *khurreef*."

SELECTED EXAMPLES OF RELIEF WORKS FOR BOTH THE ABLE-BODIED AND THE INFIRM CARRIED ON BY THE DEPARTMENT OF PUBLIC WORKS.

(From Mr. Henvey's Memoir, pp. 104-106.*)*

Moradabad and Tigree Road.

Preparations for the work.

At the close of 1868 Government issued a circular pointing out the quarrying of kunkur, military buildings, and the enlargement of the Tigree Road as suitable

* Weavers. † Cotton printers. ‡ Curriers.

works to be undertaken by the Public Works Department officers for the relief of the poor in Moradabad. From January to May 1869, the two former classes of works gave employment to daily averages of 1,274 and 818 people, respectively. The Tigree Road employed the following numbers :—

Details of numbers and cost.

Period.	Average.	Expenditure.	Rate of work per 1,000 cubic feet.
		Rs.	Rs.
1st to 15th January	218		
15th to 21st „	568	895	15 to 18
21st to 31st „	1,140		
1st to 14th February	2,348	6,893	13 to 14
14th to 28th „	4,834		
1st to 15th March	3,231	8,238	8 to 9
15th to 31st „	4,710		
1st to 15th April	3,418	8,052	8 to 8½
16th to 30th „	3,083		
1st to 15th May	1,963	3,738	6 to 7
15th to 31st „	910		
June	500	4,818	3½
July			
	1,636	32,634	.....

The distress was not marked at the commencement of the year. This was foreseen by the Collector of Moradabad, who warned Mr. White, Executive Engineer, in charge, that the tanks in process of construction and the clearing of jungle would keep the people near home for some time, but that he must be prepared for large numbers after the end of January. From February to April the assistance given was very great and of essential service to the relief of this part of the country. At the beginning arrangements for supplies were entered into by Mr. White with trader of Moradabad, who was to get 17 annas for every 16 annas' worth of food supplied ; but shortly afterwards the Collector took this part of the measures upon himself. The gangs were kept within moderate dimensions, 800 or 900 people, and stationed at points within convenient distances from the work-people's homes. At four points grass-huts 50 feet long were erected, and in them 30 or 40 infirm, maimed and blind persons resided. The deaths were 12.

Arrangements for supplies.

The rates at which work was turned out varied from an excessive amount in January to a moderate scale in May, June, and July, by which time the people had been induced to take task-work, and payments for daily labour were abandoned. The high rates in the early months are partly ascribable

Rates of work.

to the expense of building huts and making sanitary arrangements, and partly to the fact that the tools at the disposal of the officers in charge were at first so few that until a sufficient supply had been manufactured, the labour could not be fully turned to account. But there were two other causes. The scale of wages adopted was needlessly high at the commencement, and was only reduced to a moderate amount in March. It was as follows :—

Month.	Beldars.	Coolies, able.	Coolies, weak.	Children.
	As. P.	As. P.	As. P.	As. P.
January	2 0	1 6	.....	1 0
February	1 9	1 6	1 0	0 9
March	1 4	1 0	.....	0 9

And secondly, a very great number of the people employed were old men and young children, from whom only light tasks could be exacted.

Proportions of able and infirm.

The following figures have been worked out from a table given by Mr. White :—

Percentages of labourers, i.e., the proportions between skilled and unskilled, able and infirm.

Period.	Skilled.	Unskilled.	Able.	Infirm.
	Per cent.	Per cent.	Per cent.	Per cent.
January	13	87	77	23
February	8	92	46	54
March	2	98	12	88
April...	.....	100	15	85
May	2	98	18	82

Conclusions drawn from the figures.

The significance of the above percentages is twofold. They explain, in the first place, why the expenditure exceeded the usual scale, and, in the second place, they show how completely the works answered the object for which they were designed. The unskilled labourers, and they for the most part old or weakly, were just the persons who must have died but for relief, and who, on the other hand, would probably have never reached the poor-houses. This, therefore, is an example of a special relief work conducted by direct departmental agency, and of the greatest possible service, notwithstanding the somewhat excessive rate of expenditure.

Banda, 1869.—Rates and outturn. (Daily wage system.)
(Mr. Henvey's Report.)

Classes requiring relief.

Measures of relief.

The classes requiring aid were field-labourers, and the most numerous applicants, chumars. It was not, however, until the beginning of March 1869 that active operations were called for. Special relief works, consisting chiefly of the deepening of tanks and raising of embankments, were then taken in hand. Ordinary district works also gave employment until the hot weather of 1869, and advances to zemindars for raising earthen embankments were useful in employing labourers near their own homes, who must otherwise have resorted to the special relief works.

Numbers employed on works.

According to the official report, the daily numbers of applicants for labour were as follow :—

	March.	April.	May.	June.	July.	August.
On special works ...	24	1,112	3,486	3,105	523	236
On district works ...	139	184	7,457	3,161	360	198
Total ...	163	1,296	10,943	6,266	883	434

Average over the whole period 3,259.

Demand for employment greatest in May 1869.

From this table it appears that the demand for employment was very great in May, when all harvest operations had ceased, and that it declined rapidly as soon as the rains began. The extent to which labour is required in the rainy season will be readily conceived when it is remembered that the cotton crop alone usually takes five or six weedings. In the year 1867 many fields were seen completely choked with weeds, because sufficient labour was not procurable.

Description of special relief works.

The special relief works were started almost entirely in the Tirohan pergunnah; but in April 1869, it was observed that people from villages in Dursenda near the Jumna were flocking to the Manickpore Road in Tirohan, and it was thought better to give such people employment in Dursenda and Banda near their homes. The first work undertaken was a new tank on the Sidye Nullah in pergunnah Tirohan, on which, from 2nd March to 20th June 1869, 101,755 men, women, and children were employed, at a cost of Rs. 7,285-4-2. The last work to close was the cutting of a *ghât* on the Paisunna river, which was kept in hand until the 15th September 1869, and gave employment to 14,238 labourers between that date and the 15th July.

High rates explained.

The rates at which work was turned out were not remunerative. They varied from 15 annas to 6 annas per 100 cubic feet, and were extremely high as compared with the ordinary district scale. The causes assigned are—*first*, that the labourers

were unskilled; *secondly*, that the hardness of the ground in May and June increased the cost of digging; *thirdly*, that it was necessary to allow an interval of 5½ hours' rest at midday to lessen the risk of sunstroke, which was not even thus entirely avoided, for on the 9th May, nine persons were killed by the extreme heat, and 27 prostrated at the Manickpore road, notwithstanding the observance of all ordinary precautions; *fourthly*, that miscellaneous expenditure, such as hutting, hospital, and burial charges, swelled the cost.

Mortality from sunstroke.

Relief works for both the able-bodied and the infirm together.

Bellary, 1854.—Mr. E. Maltby, Member of Madras Revenue Board on deputation, 13th November 1854.*

I now proceed to offer a few observations on the mode in which employment has been given to the people, the numbers which have been employed at various times, the expenditure incurred, and the supposed value of the work performed.

Kind of employment provided.

I have already observed that, in consequence of a want of materials and carriage, it was found impracticable to undertake bridges or other works of masonry, and that the people were therefore employed in earth-work, chiefly in making roads, which occupation, besides being a public benefit to the district, was best suited to untrained labourers, and afforded the most easy means of giving employment to large masses of indigent people within a moderate distance of their villages. In Bellary, however, some of the poor were advantageously employed in improving the pettah and town with the approval of the Board of Revenue; and on the application of the General Commanding the Division, to which the Board gave their sanction, the Collector afterwards placed 2,000 to 3,000 of the destitute poor at the disposal of the military authorities for employment in the cantonment. The useful work upon which they were employed are enumerated in a letter from the Deputy Assistant Quarter-Master-General, which also shows that the principal tank, upon which the town and Cantonment depend for drinking water, has been cleared out at an expense of Rs. 9,468; although a similar work could not have been performed in an ordinary year at the usual rate of wages for less than Rs. 16,161, and that a lasting benefit has thus been conferred on the station at a saving of Rs. 6,695. With this exception, and small improvements to the streets of the town of Gooty and Adony, the people have been employed on the lines of road shown in the map which accompanied the first part of this report. The details of these lines could not be at present furnished, and will be forwarded hereafter through the prescribed channel when their accounts are closed. I shall, therefore, limit myself on this occasion to giving a general statement of the number of people employed, and the total monthly expenditure until the end of September.

* From Mr. Dalyell's Memoir on *Former Scarcities in Madras, previous to* 1866.—Madras 4to.

Bellary, 1854.

Numbers and proportion of population employed.

The returns of the first week in each month show that the number of people on the charity roads has been as follows :—

	Rs.
January	8,766
February	16,017
March	22,279
April	48,299
May	77,862
June	93,092
July	97,554
August	77,768
September	65,869

The highest number reached was in the second week of July, when it amounted to 100,599, being 8 per cent. of the population of the entire district. In the talooks, where the distress was greatest, the percentage of the poor employed bore the following proportion to the number of their inhabitants :—

Bellary	16 per cent.
Adony	17 „
Goolem	19 „
Punchapollem	16½ „
Gooty	28 „

On comparing the above return with the statement of monthly prices given in paragraph 7, it will be observed that the number of applicants for assistance increased with much regularity in proportion as food became dearer, and the result has borne out the opinion of the Collector, who, in his report to the Board on the probable deficiency of the harvest and the amount of old grain in store, calculated that 75,000 or 6 per cent. of the population might require temporary relief. The applicants for employment have consisted of all castes and occupations, and comprised, in many instances, cultivators of the better class with their families. The women and the boys have always exceeded the men who have more varied means of finding employment, and in September their relative numbers were as five to three. The returns for that month show that nearly one-fourth of the men then employed contributed directly to the public revenue, the rest were weavers, farm-labourers, and common coolies.

Subordinate Establishment—Native.

At first the Collector, with the aid of his Assistants and native establishment, had to arrange for commencing the charity roads, and establish a system for employing with some degree of regularity the large numbers of indigent applicants who sought relief. The arrangements made by the Collector for the purpose were reported to the Board of Revenue, and made entire approval. With the aid of the Civil Engineer's establishment and the Maramut Superintendent parts of lines were marked out, and the people set to work under the superintendence of the Assistant Collectors, of whom Mr. C. R. Pelly was the most

Bellary, 1864.

active, and the tehsildars aided by a temporary establishment. The coolies (male and female) were divided into companies of 600 individuals, which again were sub-divided into five gangs of 120 each. The establishment entertained for each such company was as follows :—

			Rs.
1	Mootsuddy or Accountant, at Rs. 8	...	8
5	Darogahs, at Rs. 7 each ...	...	35
10	Kolcars, at „ 4 „ ...	...	40
	Total	...	83

Its monthly cost amounted to Rs. 83 ; and there were also appointed, in some instances, native overseers or peshkars, on salaries ranging from Rs. 15 downwards, to assist the tehsildars.

Upper Establishment—European.

When the seven [European] officers [military] who were appointed to be Superintendents arrived, they relieved the Collector's Department of the immediate charge of the charity roads. Distances, averaging generally 50 miles, were assigned to each, and within their respective ranges they had entire control over the coolies and the native temporary road establishments under the instructions of the Board of Revenue. The payment of coolies and the subordinate road servants dovolved entirely upon these executive officers, it being arranged that they were to draw on the Collector for such money as they required from time to time, and to be responsible for its safe custody and disbursement, sending detailed accounts of the expenditure to the Collector and Civil Engineer. In cases of misconduct these officers were empowered to dismiss their native subordinates, and the Collector, while at times communicating to them his wishes either direct or through the Civil Engineer, relied much on their judgment and local information for admitting or rejecting applicants for employment on the roads, and for discharging the least indigent of the coolies as the pressure of the distress abated. Detailed instructions* were drawn out for the guidance of these executive officers by the Civil Engineer, Major Henderson.

* Cited below in abridged form.—J. G.

But it seems proper here to explain that in some remote places, distant from the main lines of roads where it was found necessary to give assistance to the very poor, the arrangements for the purpose have continued under the superintendence of the Collector and his establishment. Thus, out of the 47,118 coolies still employed on the 14th ultimo, 4,143 are under inspection of different tehsildars controlled by the Collector, as shown in the marginal statement. Measures will now be taken to stop all this description of work, leaving such labourers as are in absolute want to apply for employment to the nearest Road Superintendents.

Bellary Talook	... ...	240
Adony do.	... ...	800
Goollem do.	... ...	1,160
Punchapollem Talook	... ...	1,142
Raidroog do.	... ...	821
Dhurmaverum do.	... ...	480
		4,143

Bellary, 1854.

Modes of payment—Daily or weekly wages subject to reduction for short work—Also task-work.

At first, various modes were tried of paying the coolies. In some instances the payments were made daily, in others bi-weekly, and in others weekly. It was, however, found that much difficulty and loss of time arose from attempting frequent payments to such large bodies of people, and the practice now is to pay them at the conclusion of each week. The mootsuddy or accountant appointed to each company of 600 coolies keeps a book in which the name of every individual is written, and entries are made in it after each morning and evening muster to show the parties presence or absence. At the end of the week the wages thus found due to each person are added up, the coolies are assembled for payment, and under the orders of the executive officers the European or the native overseer proceeds down the line paying to each individual the sum entered in the book. In cases of slowness or misconduct, the Superintendents impose fines on the coolies, and the amount is deducted from the wages found payable to them.

In accordance with the instructions conveyed in your letter of the 23rd ultimo, I enquired of the Road Superintendents if they have been satisfied with the conduct of their native officials, more especially in that part of their duty which relates to the payment of the labourers, and availed myself of the opportunity to ask if the European overseers had also given satisfaction and proved equal to the heavy and extensive duties devolving upon them. The correspondence which passed on the occasion forms enclosure 4 to this letter, and gives the following result:—Major Bisset and Captain Devereux, who have had the largest bodies of coolies under them, and had therefore to make much use of native agency, both express dissatisfaction, and state that, notwithstanding repeated dismissals and punishments, petty frauds and irregularities have prevailed. Captain Palmer writes to the same effect; but Lieutenants Jones, Law, and Davies, and Ensigns Johnson and Haukin, do not make similar complaints, though it is to be remarked that these officers have had more facilities than Major Bisset and Captain Devereux of watching the payment of wages either personally or through their European overseers. It will be observed that the value of the European overseers is highly spoken of, and an opinion expressed that the public interests would have been advanced if more servants of this description had been available. Under the want of a sufficient number of these overseers, Captain Devereux has tried the experiment of appointing tasks to his gang instead of fixing a number of hours for daily work, and states that the result has proved successful. The frauds imputed to the native officials consist principally of the entry of fictitious names in the cooly register, the levy of fees from the coolies, and the acceptance of small bribes or

The gangs of coolies have fluctuated much, but stood thus on 1st September—

Major Bisset	18,534
Captain Devereux	17,242
„ Palmer	4,354
Lieutenant Law	8,700
Ensign Johnson	5,676
„ Haukin	1,293
Lieutenant Jones	2,065

„ Davies has only lately been brought from the Karnoul roads, and employed within the Bellary frontier.

Bellary, 1854.

allow them to be absent or remain idle. To check irregularities, the coolies have received their wages in all possible cases under the eyes of the European overseers and the executive officers.

Wage-rates allowed.

The next part of the subject relates to the wages paid to the coolies until the end of July; the rates per diem,* although occasionally lower, may be said to have been, for men 2 annas, for women and children 1½ annas;—but as some rain fell in July and enabled cultivation to be carried on in parts of the district, the Collector was anxious to relieve the State from a portion of the heavy expense which had devolved upon it, and prevent any risk of the people giving up their ordinary agricultural occupations for employment on charity roads. Many labourers of the better class were therefore discharged, and an attempt was made to restrict the number of individuals in each family to be employed. But as difficulty was found in carrying out the latter arrangement, it was determined to lower the rates of wages, which were consequently fixed as follows:—Men 10 annas—two pice being added when the labourers brought their own tools; women and children one anna. No children have been admitted who were not able to carry a common basket-load of earth. At my suggestion the Collector has since ordered that children are never to receive more than eight pice, and I concur with him that these rates afford a bare subsistence with grain at its present high price, and create no temptation for the people to seek aid from Government when they have other means of earning a livelihood. I learn from the Agent at Kurnool that he has recently made a nearly similar reduction in the wages paid there.

* Working days are here meant. No pay was given for Sundays.

Wage-rates (specified) believed to have been unduly high.

The wages which were given at first to the road labourers in Bellary have led to some correspondence, as an expression in one of the Collector's letters caused an impression that the ordinary rates had been increased. Government therefore called for explanation; observing "that the object being merely to prevent starvation, great care should be used to keep the rates down to what will provide mere subsistence, in order that the people may not be tempted to stay when they can get their work by which they can exist." In reply, the Collector explained that he had not increased the customary rates, which are two annas per diem for a man when food is cheap, but that he had thought it necessary not to diminish them at a time when grain was double its usual price, and a seer of *cholum*, a man's ordinary food, absorbed one anna of the wages, out of which he had to support his family as well as himself. This explanation was afterwards referred to by Government when noticing the observations which the Supreme Government had recorded under a similar impression that the usual standard of wages had been raised.

Bellary, 1854.

In the instructions issued to me, my attention is particularly called to this subject, and I feel it therefore incumbent upon me, after giving it much consideration, to express an opinion that it would have been advisable to make, in the first instance, a reduction in the ordinary rate of wages, such as was afterwards carried out. I am not insensible to the Collector's arguments that without a sufficiency of food for themselves and families, the labourers would have been less able to bear daily work and exposure, and his proceedings were sanctioned by the Board of Revenue as then composed, who expressed a concurrence in his opinion that the rates of hire to be paid to the people "must, to some extent, be regulated by the price of food." It has also been found that, under the reduced rates, crowds have still been ready, such was distress, to flock to the roads for employment and subsistence. It appears, however, to me essential to bear in mind that the ordinary rates of wages are fixed in return for an expected amount of labour which is never obtained under circumstances like the present, and that the relief afforded when public works are undertaken to save the people from starvation, is increased by various members of the same family being admitted among the applicants for aid. Although therefore food may be dearer than usual, no solid claim can, in my opinion, be advanced for those rates of wages which were fixed for able-bodied labourers in times when labour is in demand; and as a matter of expediency also, it seems to me necessary to guard against applications from persons not absolutely destitute, and thus diminish any risk of the burden thrown upon the State being increased beyond the actual necessity. To attain this object, wages must be somewhat reduced below the usual standard, and it seems to me advisable that this general principle should be kept in view on all similar occasions.

Amounts expended month by month.

The monthly advances from the Collector's treasury on account of these works, until the end of September, are shown in the following statement. The total amounts to Rs. 12,28,270-1-8, and full details of the expenditure will be submitted after the close of the works by the Collector and Civil Engineer, through the prescribed channel:—

	Rs.	A.	P.
December 1853	1,464	2	0
January 1854	14,637	12	8
February ,, ...	59,562	9	2
March ,, ...	61,273	10	7
April ,, ...	1,16,357	3	10
May ,, ...	2,13,269	7	7
June ,, ...	2,66,999	9	9
July ,, ...	2,86,314	5	5
August ,, ...	1,35,370	12	3
September,, ...	73,040	8	7
Total ...	12,28,270	1	8

Bellary, 1854.

In examining the main heads of the outlay, I find that this cost of the superintending agency, European and Native, has been 5 per cent.

Outturn of work.

In estimating the value of the work performed, my principal authority is the Acting Civil Engineer, Lieutenant Walker, who, under the instructions of Board of Revenue, inspected the roads and made a detailed report upon their value, after describing the data upon which his calculations were based. Lieutenant Walker valued the roads at Rs. 1,760 per mile in the black cotton ground, and Rs. 550 in the red soil. At this estimation the 300 miles of road then completed, omitting masonry drains and bridges, amounted in value to Rs. 4,43,300.

But as a portion of the above roads, equivalent to about 45 miles, are within the Kurnool frontier, and considerable progress has been effected since the date of Lieutenant Walker's report, I have made enquiries regarding the amount of work performed in the Bellary district itself up to the end of September. The result shows that 284 miles of road were then completed (bridges and drains omitted), 46 miles in an unfinished state and 42 miles lately commenced. From want of exact information regarding the portions of these lines which traverse black and red soils, I can only offer an approximate opinion of their value; but it appears to me that they ought not to be valued at a less sum than 300 miles of finished road mentioned in Lieutenant Walker's report. Adding to that amount Rs. 30,000 upon a rough calculation on account of improvements in Bellary town and cantonment, the total value of the work performed is Rs. 4,73,300. But in estimating the value of these roads, one material point must not be overlooked, although I have not at present the means of representing its value in money. By rapidity of execution 300 miles of road, which would otherwise have occupied several seasons, have been suddenly opened to the commerce of the country, and the gain of a single year in obtaining such an advantage is of no ordinary importance.

Comparing the above sum of Rs. 4,73,300 with the expenditure up to the same date, Rs. 12,28,270-1-8, it will be observed that the cost of these roads has been as 2¼ to 1 of what it would have been if they had been constructed in an ordinary season with a choice of skilled labour and a superintending establishment proportioned in strength to the number of work-people employed. This result exhibits a very important improvement since the commencement of operation when the outlay and the value of the work performed are calculated as 5 to 1, and will, I trust, be satisfactory to Government in reference to the remarks contained in Minutes of Consultation of the 12th April last, paragraph 1. Works carried on during an emergency like the present, must always be executed at a great disadvantage. Crowds of starving persons, many of them utterly unaccustomed to handle a pickaxe or spade, such as weavers and other artisans, had to be suddenly employed in road-making when no means of adequate superintendence were at hand; and the expense of the work has been increased by the impossiblity of obtaining any carriage, so that all the

Bellary, 1854.

materials required for use, gravel, sand, or earth-stones, for the rough drains and water for tamping had all to be brought by hand. In the commencement especial difficulty was felt, but gradually order and regularity were established, and the people became accustomed to the work. The arrival of the Road Superintendents, with their European Overseers, increased the means of effective superintendence, although not to the extent that could have been desired, and under these advantages and a reduction in the rates of wages, the cost of the roads has undergone important diminution. It will be observed that, according to Major Henderson's calculation, an European Overseer was required for every gang of 1,200 coolies, and an Executive Officer for four such gangs, or 4,800 men. But in consequence of the unexpected augmentation of the distress when the rains again failed in May, June, and July, the Executive Officers have had to employ gangs of 20,000 and 27,000, with at most six European Overseers to aid them.

Total expenditure incurred.

I am happy to be able to mention that, since my last reports on the subject, the season has continued favorable; and as many of the people will soon find employment in gathering the early crops, arrangements will be made for bringing charity roads to a close at the end of the present month, in the expectation that Government will sanction their gradual completion on estimate, for which plans have been submitted, and thus enable some of the poorest classes still to find employment. The total expenditure which will have fallen on the State in relieving the population from starvation, can therefore now be calculated with accuracy at about 13¾ lakhs; the advances from the Collector's Treasury in October having consisted of Rs. 1,03,708-5,* and the expenditure in November not being expected to exceed Rs. 50,000.

* The decrease in the number of coolies employed made the actual outlay in October less than in September, but the advances drawn by the Road Superintendents from the Collector's treasury are not always expended in the month in which they are debited in the Collector's accounts.

General review of the Bellary famine, 1854.

The outlay thus incurred amounts undoubtedly to a heavy sum, but I feel a firm conviction that the measures sanctioned by Government have been all expedient, as they were liberal and humane. A large province has been preserved from anarchy and starvation, and instead of the extensive loss of life, property, and future revenue, which must otherwise have occurred, its population has been preserved to cultivate the lands and add to the future resources of the State. Nor is the expenditure in the present year to be regarded as simply a gratuitous one. The circulation of such a sum at a season of distress had a beneficial influence on the general industry and revenue of the province, and the construction of such important lines of road, if duly maintained in order, must be of the highest advantage to its future prosperity.

It has been satisfactory to me to find that, except during visitations of cholera which were occasionally severe, no unusual mortality has

Bellary, 1854.

occurred in the district, which I attribute to the prudent care with which measures were taken to furnish the people with means of subsistence before their health was weakened and diseases introduced by privation and unwholesome diet. Another gratifying result of these timely measures has been the preservation of order and suppression of crime. In the commencement of the distress some of the suffering poor were driven to acts of robbery, and much public alarm was felt; but when the means of subsistence were offered by employment on public works, order and security returned, the people gladly availed themselves of the honest livelihood thus held out to them, and have generally exhibited patience under their losses, and a ready obedience to their employers. This result is doubtlessly much owing to the care with which they have been guarded from all harsh treatment, and the laudatory remarks of Major Henderson on this point appear to me well merited. In this year of distress the Police Returns* from January to August show on the whole a diminution of offences against property, though a slight increase took place in robberies by open violence and on the highway. The population of the district amounts to 1,229,599 souls, and the only addition which has been made to the ordinary police consists of the 454 temporary peons, whose employment was sanctioned by the orders of Government, dated the 9th December 1853 and 25th August last.

* Total robberies, thefts, in	Cases.
1853	762
Take of above for 8 months, or two-thirds of the year ...	508
Total robberies and thefts in 1854, till August, or for 8 months	464

	1853.	1854.
Gang robberies	... 150	155
Highway robberies	... 51	79

In conclusion, I will only observe that if the prices of grain during the past four months are admitted to show that the dearth in this district has at all resembled the distressing famine in Guntoor in 1832, the difference in the result under the late liberal and beneficient measures of Government is most striking. In Guntoor 200,000 perished or emigrated out of a population of 500,000; and omitting all private losses of property, crops, and cattle, this disappearance of the population caused a falling off in the revenue which, in 1842, was estimated to amount to 66 lakhs, while it was expected that 45 more (making in all 111 lakhs) must be incurred before the cultivation of the district could regain its former level. In this district the people have been saved to add to the future resources of the State, so that the loss† in direct revenue will, I trust, be limited to 9¾ lakhs if the ensuing seasons are of an ordinary character, and the outlay of 13¾ lakhs, which has been made in improving the communications of the district, may be confidently expected to have a most important result in increasing its future prosperity.

† Decrease in Fusli 1262 ...	Rs. 5,76,475
Probable decrease from diminished cultivation owing to loss of cattle in the next years	4,00,000
Total ...	9,76,475

On the moral effect of the liberal measures sanctioned by Government on this emergency, I shall not presume to dilate, though the spectacle of thousands rescued from starvation, and a large province passing

Bellary, 1854.

through such a trial in orderly tranquillity, cannot but have made a powerful and beneficial impression on the public mind.

As a description of the road-work performed will be most satisfactory to Government when coming from its professional officers, I have not entered into any details on this subject; but it seems proper to observe that nearly 300 miles of good road have been constructed through bare plains of black cotton soil, which have been hitherto quite impassable after any rain, and it would be an omission on my part not to notice the zeal with which the European officers of all descriptions have exerted themselves on this occasion under the intense heat and other discouragements of such a season as that which has just passed.

Civil Officers' rules and practice on Bellary Relief Works, 1854.

(*From a letter of the Assistant Collector, 28th January* 1854, *cited in Mr. Dalyell's Memoirs on former scarcities in Madras.*)

I have the honor to report, for your information, the method adopted by me in carrying out, in conformity with your directions, the orders of the Government for the employment of the poorer classes during the present season.

Applicants for work are divided into gangs of 600 each, to each gang is assigned one mootsuddy, whose duty is to call over the names of the coolies in the morning before seven and in the evening at six o'clock, during the day to go occasionally along the line of coolies with the list, and without calling over the names to ascertain that all are present. It is further his duty to prepare by each sixth day a fresh list, forwarding the old one to the amildar, and to make daily such entries in the list as may be required, such as idleness or irregularity of attendance on the part of the coolies, absence from sickness or other cause.

Each gang of 600 is sub-divided into parties of 120 each; to superintend each of them, there is one darogah and two koolcars; the darogah's duty is to superintend generally each party of 120, mark out the line of road from one flag to another, mark out check channels and drains, and attend to the levelling and metalling of the road. The koolcars have each the immediate superintendence of 60 coolies for the due performance of the work, on whose part they are responsible to the darogahs, and the darogahs in turn to the amildar. The darogahs and koolcars are also responsible for the implements supplied on the part of Government to their respective parties.

The coolies of one gang or sub-division are not allowed to change to another. If they leave their own party from any other cause than illness, and subsequently re-apply for employment, they have to get themselves entered in a newly forming gang. This is necessary to prevent confusion, and in order that the mootsuddies, darogahs and koolcars may know their respective gangs and parties. That the gangs may be kept up to the proper number, *viz.*, 600 vacancies, as they occur, are filled up from the fresh arrivals.

Each gang of 600 is kept well away from the other located as far as practicable in a different village on or in the vicinity of the road,

Bellary, 1854.

and each sub-division of 120 is also kept separate from the others; thus it is at once apparent what darogah and koolcars are to blame for non-performance of work; and in the event of cholera breaking out, the gangs by being then separated will probably suffer less than would be the case were they all assembled in one village.

Payments are made according to the enclosed form on the road in the following manner:—The amildar, sheristadar, or peshkar, as the case may be, goes on Monday to one gang of 600 and pays the first sub-division of 120; then moves on to each other sub-division in succession. By this means only 120 coolies are idle at the same time, and but few minutes are lost as the people are on the spot to return to their work as soon as the payment is made. The following day a second gang is paid in the same manner, and when the numbers render it requisite, two gang can be paid on the same day. The advantage of paying the people on the road in small parties is obvious.

It appears to me advisable at present to adhere to the system of payment each fourth or sixth day. The payment should be made by some responsible person whose character or interest places him above any attempts to defraud the coolies. At the present season of the year it is impossible for the amildar or sheristadar to make daily payments in person to all the coolies: revenue business requires their presence elsewhere. By making the payment once in four days where there are only four gangs, once in six days where there are six gangs, and if more to two gangs on the same day, occupies a comparatively short time. When the amildar is absent on revenue business, the sheristadar and peshkars make the payments; in like manner, when the sheristadar is absent, the amildar takes his place; when both these officers are of necessity absent, the peshkars make the payments, and to the latter officers occasionally doing so, I see no objection.

8. When European Superintendents are available, the frequency of payment may be increased; but as far as I have seen, the coolies do not, after the first six days; make any objection to the present system: those coming fresh to the work naturally require immediate payment, and as far as practicable in such cases an earlier disbursement has been made.

To comment on the execution of the work would be premature. I may, however, in conclusion, remark that a large number of people employed are of the weaver and other classes totally unaccustomed to such work, awkward in the performance of it, and resorting to it as the only alternative to keep them from crime or starvation during the present season.

Engineer Officers' Rules and Practice on Bellary Relief Works, 1854.

MEMORANDUM BY THE CIVIL ENGINEER, CITED IN MR. DALYELL'S MEMOIR.

The people are worked upon the roads in gangs, each gang being composed of about 1,200 individuals; and at the head of each gang is an European overseer, whose duties are to organize the people, to see that

Bellary, 1854.

the road-work is carried on according to the prescribed measurements, to be present at the payment of the people, and to report to the officer in charge the quantity of work done daily according to actual measurement.

2. To assist the overseer in his duties each gang is provided with two gomastash or one for every 600 people. The duties of these men are to number the people and to keep the accounts which they will daily hand over to the overseer, to whom they will be responsible that no people are charged for but those who have been actually employed upon the work.

Note.—The scale of establishment laid down in paragraphs 2 and 3 was acted on as far as practicable; but it was not always possible to find trustworthy servants in lieu of those discharged for misconduct.

3. To organize the people so as to employ their labour to the best advantage, each gang is divided into 10 parties of 120 each, and to each of these parties is assigned a darogah and two koolcars. The darogah at the head of each party is answerable that it is complete, or consists of the proper number; and as he and the two koolcars remain with the party during the whole day, it is their duty to check all irregularities, to prevent the people absenting themselves, and to exact from them a proper degree of labour with reference to their physical capabilities.

4. As the darogah should not be allowed to increase their parties beyond the complement of 120 men, one or two reserve parties each under a koolcar may be formed to each gang for the immediate admission of people seeking employment. From these reserve parties all deficiencies in the darogah's gangs should be made up, and when the reserve amounts to nearly the number of a darogah's party, it should be formed and worked like the others.

5. A maistry attends each gang for the purpose of marking out the work which should be always ready for at least one mile in advance of the spot where the foremost party of the gang may be working. The intervals between the parties should also be marked out in the same manner. This is essential to prevent waste of time arising from the people not knowing where to work. The maistry is also required to assist in the measurement of the work.

6. It is considered that a European officer can undertake the executive superintendence of four gangs, making in all about 4,800 men extending over from 30 to 40 miles of road. This officer will be constantly moving over his charge to regulate the work, to check irregularities, to stimulate every person employed to exertion, and by personal examination to verify the measurements of the overseers and maistries, so as to ensure correctness in his monthly reports which, together with a diary of his proceedings, have been called for by the Board of Revenue, Department Public Works.

7. Four European overseers were originally attached to Captain Devereux, but one has since returned to his regiment. This officer has only three overseers (or three gangs) under him. The number of people in each gang has varied considerably on account of the visitation of cholera which caused hundreds to leave the work. Lieutenant Law has

Bellary, 1854.

four overseers with a corresponding number of gangs under him. It is calculated that the number of people along his charge will amount to at least 5,000.

8. The superintending officer will be provided with sections for his guidance showing the manner in which the road is to be formed in different soils. These sections are all adapted for level ground, being the general character of the line from Bellary towards Hyderabad and Kurnool; but occasionally, where the road passes through low ground, it will require to be raised, and in such cases it will be necessary to extend the side slopes at the rate of two feet of base for every foot raised. The side channels will be removed to a corresponding distance on each side, so as to allow the same clear space between the foot of the slope at the side channel, as is shown on the level ground.

18. In working the parties a proper proportion of pickaxes, mamoties, and baskets should be allotted to each. The general proportion seems to be 30 picks, 30 mamoties, and 60 baskets for each party. This may admit of modification according to soil and other circumstances. The superintending officers will keep a strict account of the Government tools, enforcing upon their subordinates the necessity of preserving them from wanton injury or depredation.

20. Each party, *i. e.*, darogah's party, should be provided with a bamboo, nine feet in length, marked off into feet and inches, and each darogah and koolcar should furnish himself with a yard measure similarly marked off. It is also of great importance that each party should be provided with three or four stout ropes, each 100 yards in length, as well as with a supply of 30 or 40 pickets and a couple of mallets. These supplies being always at hand fresh work will easily be marked out when required, and the measurement of work performed will also be greatly facilitated.

21. The attention of the maistries should be directed to the marking out of the intervals between the parties first, and then to the selecting and laying down of fresh work in advance of the foremost party of each gang. A few people with pickaxes and mamoties, and an intelligent koolcar, should accompany the maistry to give assistance in this duty. By this means these people will soon learn to mark out the road independently of the maistry, which will be a great advantage to the rapid progress of the work.

22. The daily work commences by the people of each party assembling early in the morning under its darogah, who then proceeds to muster them, and if he can write, he notes in his list the names of the absentees and also of new comers, making his party up to 120 people. He then orders his party to commence work. Meanwhile the overseer is also in attendance and visits each party in succession, receiving a report from the darogah, which he verifies by examination. Each party on the approach of the overseer leaves the work and assembles on the roadway in two lines—the able-bodied men forming on one side, and the aged, the women and children forming the other. The overseer passes between the lines and counts the people, orders them to re-commence work, sees that they are properly placed, that work is going on

Bellary, 1854.

regularly, and passes on to the next party. The parties are placed at from 200 to 300 yards from each other—220 yards would perhaps be a good distance to fix upon as being one-eighth of a mile, the length of a road occupied by a number of parties could be easily calculated.

23. Whilst the people are at work, they have a natural tendency to crowd towards each other, as well as to leave off work at a spot where the ground may be hard, in order to take possession of easier soil. It is therefore necessary to assign a certain space to be occupied by a given number of work-people. In some places one pick, one mamoty, and two baskets have been assigned to every three yards in length, whilst in others these numbers and proportions have been varied. The main object, however, should always be kept in view, *viz.*, that of giving the people free space to work in without incommoding each other, and also to prevent accidents in the use of tools from being over-crowded. A party of 120 people working 60 on each side of the road, and occupying its length at the rate of four people for every three yards will cover a length of 45 yards.

24. The people are generally mustered and set to work by 7 A.M. They then work till 11 A.M., when they leave off to rest and cook their meals, should their village be near. This intermission lasts for two hours, *viz.*, till 1 P.M., and people work again till 6. But if their villages be far distant, they prefer one hour's intermission only in the middle of day, and to be discharged at 5 in the evening, instead of 6, in order to reach their homes before it becomes dark.

25. The people having been supplied by tools from Government, appear to be in the habit of carrying them home with them in the evening and bringing them back next morning. As long as there is a prospect of a continuance of work, this practice may perhaps not be objectionable, as the possession of implements will be looked upon by the workman as a guarantee for his employment; but when the work is about to cease, a temptation will arise to the labourer to appropriate to his private purposes the implement that has for so long been his companion, and this ought to be guarded against by the adoption of timely measures for the security of the tools.

26. The baskets generally used are too small and ought to be increased in size. This is a point of importance, as upon it depends the time required for the removal of the loose earth. The quantity now carried by the women is, in most cases, less than half what it ought to be. The broad, shallow baskets used by the wudders is the best pattern. The work of removing earth is performed by the women, children, and the aged men, whilst able-bodied men are engaged in digging with the pickaxe and mamoty.

27. The people are paid at two rates only, *viz.*, two annas for the able-bodied men, and one anna four pice (*sic*) for the infirm and for women, and for boys under 16 years of age. The payments are at present made weekly; but as this is too long an interval, it is desirable that it should be altered, so that the people may receive their wage every day or at least every second or third day. Under the present system, a man may have worked for several days without obtaining his

Bellary, 1854.

hire, and should he be taken ill or die, the value of his labour will be lost. But besides this, the people employed are those reduced to the lowest ebb of poverty, and who have not the means to purchase daily food at its present triple price. It is therefore highly desirable that this means should be given to them, in order that they may daily recruit their strength against the exposure and labour required from them. Such an arrangement, if it can be carried out, is also dictated by humanity; for it would have the effect of keeping the people healthy and fortifying them against disease, and specially cholera, to which so many of them have already fallen victims.

28. The system above advocated might be probably carried out by the use of tickets, which could be issued to the people in the morning and taken back in the evening in exchange for daily hire—each ticket being marked with its value, the person holding it would be paid accordingly on presentation. The overseers, with the assistance of the gomastahs, might arrange the small change during the day for distribution in the evening, or should small coins not be procurable in sufficient quantity, probably the people would be contented to receive one rupee daily for every eight or twelve persons, according to the value of their tickets, which they could divide amongst themselves. This arrangement would save a great deal of trouble if it would be more satisfactory to the people to be paid in this manner daily, rather than have to wait a week for their hire. To ascertain this the advantages could be pointed out to the people, and they should be questioned directly by the officer as to which system they would prefer.

29. It remains for the Civil Engineer to remark upon the orderly conduct of the people, and the cheerful manner in which they perform their work. The organization of the people and their employment in gangs sub-divided into detached parties, was first established by the Collector's Department and afterwards by Captain Devereux, under whom, with the assistance of the overseers, the system is being carried out with great regularity. The road-work has been very efficiently performed, and the progress made more satisfactory, whilst the expenditure has prevented large numbers of the poorer ryots from leaving the country. It will also secure a permanent and important benefit to the district in affording easy transit for its traffic in the direction of the different lines. The roads will still require to be provided with masonry drains and bridges to render them complete; but when these are built, the lines will be of the first-class dercription and equal to any in the Madras Presidency. * * *

36. The Superintendents are particularly requested to observe that work in sufficient quantity to give employment to the people shall always be carefully marked upon the ground in advance before the gangs are moved forward for its execution, and that only those gangs or parties be advanced that have already finished the work assigned to them.

37. The Civil Engineer is aware that a paper of this kind, necessarily drawn up in haste and in the midst of other pressing duties, must be

Bellary, 1854.

imperfect, and that it cannot meet every case that may occur in the formation of expensive lines of road. But he relies upon the judgment of the Superintendents to obviate all the difficulties they may meet with, and to costruct the roads under their charge in a solid and efficient manner, whilst he has every confidence that their zeal will lead them to use every judicious means to prevent undue advantage being taken of the liberality of Government. It is understood to be the intention of Government and of the Collector that all who present themselves should find employment to the fullest extent that tools can be procured. But laziness in the able-bodied men must be discouraged, and for this purpose the Civil Engineer recommends that the overseers should be empowered to summarily dismiss from the work all people who refuse to give their labour according to their strength, and that they should be instructed to bring to notice the names of any darogahs or koolcars who may fail in their duty of efficient superintendence. It should be distinctly explained to the people that they are not to give any portion of their wages to the native officials over them, and that any case of this kind brought to notice will subject both the giver and receiver to instant dismissal. This is a point of great importance, and the more so as suspicion points to the practice having already been established.

32. The Civil Engineer cannot conclude this paper without expressing his gratification that in the course of his inspection of the road from Bellary to the boundary of the district along the Hyderabad line, not a single instance of ill usage of the people has either come under his observation or been brought to notice; and he has every confidence that the Superintendents will do all in their power to perpetuate this kindly feeling towards a people whose sufferings demand every consideration from those placed over them. Many of them hold respectable positions in their own villages; a large number are weavers thrown out employment and unaccustomed to severe bodily labour; and it is said also that other artizans of a higher class, such as goldsmiths, are to be found amongst them—a lamentable proof of the prevalent distress.

Example where pecuniary means happened to be much limited.—Ticket registration.

(CAWNPORE, 1837-38.—MR. ROSE, CITED BY MR. GIRDLESTONE.)

Two months later Mr. Rose reported the measures of relief that he had been able to organize under the discretionary powers granted to him (in common with all other district officers) by Government. He had fixed a certain limit of expenditure for each of the famine-stricken pergunnahs, and had regulated the sum by the condition and the number of the people in each. His scale of relief was—[Rs. 180 a day for the whole district, area 2,366 square miles (population now

11,900,000), the allowance being distributed in seven sums to seven tehsils, according to the measure of distress.]

	Rs.
Bilhour	35
Derapore	35
Rasoolabad	30
Akberpore	25
Bhogneepore	25
Ghatumpore	15
Sheolee	15
Total ...	180

All applicants were received in the order of their coming, with the exception of a certain number of able-bodied labourers, who were enlisted at market rates for the work of digging only. This course was necessary, as those whom hunger cast upon Government for support were found capable of no greater exertion than that of carrying earth in baskets. The excavation of tanks was generally preferred to road-making or agriculture, as more economical, and more suitable for the exceptional nature of the season. Overseers were chosen from the better classes of villagers. They received a trifle more than those whom they superintended, and were not changed so long as the tehsildars were satisfied with their energy. The wages to the common work-people were first of all at the rate of 1 anna for a man, $\frac{3}{4}$ anna for a woman, $\frac{1}{2}$ anna for a child; but the scale was afterwards reduced to $\frac{3}{4}$ anna for a man $\frac{3}{4}$ anna for a woman, and $\frac{1}{2}$ to $\frac{1}{4}$ anna for a child, according to age. As times grew harder the able-bodied men, who had originally been hired at the market price, were restricted to one anna a day. This was the cost of half a seer of the cheapest grain, and less than this would not have kept up that degree of strength, which enabled a man to get through his daily task. A reduction of the diminished rates in Pergunnah Bilhour to half and even a quarter of an anna for a man had no effect in deterring applicants. On the contrary, around each relief work labourers were assembling in larger numbers than could be engaged. The choice lay between a few mouthfuls a day and utter starvation, and it was no wonder that the pittance, however small, was eagerly sought after. Whatever number of persons could be taken on each day were admitted to work by a ticket signed and sealed by the tehsildar, and payment at evening could not be claimed unless the holder returned this ticket, and showed also a second, which was given by the tehsildar later in the day, when he had approved of the man's performance in his afternoon rounds. This double check made it certain that the money was bestowed on none but the actual work-people, and when the number of individuals assembled at a centre of relief were not more than double the number of those employed on any one day, it ensured work to every person for one day in two; because the tehsildar, on receiving back the tickets from those whose toil was over, took care to distribute them for the following day amongst those who had for the last twenty-four hours been forced to

remain idle. This system was found to answer well in all places except those where the applicants were out of all proportion to the money at the tehsildar's disposal. At Bilhour, for example, only eight hundred could be admitted at a time, and there were never less than five thousand clamouring for work. In such cases it was deemed better to employ a certain number to the exclusion of all the rest. The disadvantage of such a course was obvious, but in the absence of adequate funds what remedy was there? The agricultural classes were the first to be dependent on the State; but the petty shop-keepers and artizans—whose means of earning a livelihood was too closely linked with theirs to admit of the one falling without dragging the other to its ruin—were soon grateful for assistance also. Nor in extending relief was it possible to discriminate between the inhabitants of the Collector's own district and strangers. In Pergunnah Bilhour three quarters of the destitute were natives of Etawah, Mynpoory, Furruckabad, and Agra. In Pergunnah Rassoolabad were many emigrants from Gwalior. The only persons rejected from the relief works were the infirm, the very young, and the aged. Their wants were not disregarded, but it was thought better to leave them to the care of private charity, especially as the native officials, following the example of Government, were beginning to subscribe handsomely.

Occasions for, and limits to, special relief works for the able-bodied. When can they be safely closed?

(N. W. P.—Mr. Girdlestone.)

Such a system of employing the destitute necessarily implies considerable supervision, and hitherto it has not always been found possible to ensure efficient overseers. This difficulty may perhaps be less hereafter, for there is at the present time an inclination to have more subdivisions of districts in the North-West; and wherever there is a subdivision there is at once an opportunity for localizing relief operations. In such a crisis tehsildars and Honorary Magistrates might be made more generally useful than they have been as yet. But, with all the assistance which they may be able to render a Collector, there will still, for a variety of reasons, be need here and there of large relief works. Emigration cannot be wholly stopped; the desolation of a tract of country may be so complete as to throw the inhabitants of whole villages out of work, and withal the roads may be good enough to require only small gangs to keep them in fair order. Under such circumstances, the remedy must be in proportion to the evil, and it only remain for the local authorities to show all due care in managing the assembled multitudes. Each day the number of labourers will differ, and at certain periods it will seem from the gradual diminution as though the brunt of the calamity was over. The hope of securing something from the rubbee crops has generally induced many to return to their homes in April and May, but as soon as the grain has been stored, they are certain to come again upon the State for support till the setting in of the rains. A partial fall of rain also constantly induces the

villager to go back to his fields and chance another sowing, it may be a second, or even a third, in the same season. The sanguine way in which the natives infer that one shower out of proper season is the precursor of many more is one of the most remarkable characteristics connected with the history of famines. But their departure should never be reckoned on as final till there are the most unmistakable signs of the drought being at an end. It should always be borne in mind that nothing but continuous rain can stop a widely-extended famine. When once the ground is moist enough for the plough, the money-lender may see his way to making an advance; and until self-interest induces the keenest of speculators to open their purse-strings, it would be madness of Government to think about tuccavee.

Shaharanpore, 1861.—Colonel Baird Smith on Mohun Pass Works.

4. After having inspected the head works of the Ganges Canal near Hurdwar, between the 2nd and 4th of June, for purposes which will be more appropriately explained hereafter, I proceeded on the 6th to the Mohun Pass, in the Sub-Himalayas, where relief works were in progress, employing daily about 18,000 people. Believing these works to be among the best organised of the series in the North-Western Provinces, I was desirous of judging for myself of the manner in which they were carried on, and of obtaining some information in detail about them which could be best procured by a personal visit.

5. The work in progress may be briefly described as an elevated causeway of stone-work carried centrically along the natural bed of the Pass, through which the drainage waters from the adjoining hills find their way to the plains. About 35 years ago the obvious advantages of connecting the hill stations of Mussooree and Landour with the plains led the Hon. Mr. Shore, then Superintendent of the Deyrah Dhoon, to propose, and the Government to sanction, a project for carrying a causeway through this Pass. But the issue of the scheme was unpropitious. The line was carried not centrically as now, but laterally, following the windings of the many elevated plateaux which are found along the whole course of the Pass, and was thus exposed to the full force of the side drainage, for the escape of which no adequate provision had been made. The result was, that with the first floods of the season the great mass of the causeway disappeared; the road became as impracticable as ever, and a traditional belief has descended from that time to this, that to carry a road passable for wheeled carriages at all seasons of the year through the Mohun Pass was a work only for enthusiasts. In this belief the authorities of the North-Western Provinces did not share, and one of the first works sanctioned for purposes of relief was the Roorkee and Deyrah road, including the passage of the Sub-Himalaya by that Pass. The project was designed by Mr. Thomas Login, Superintendent of the Northern Division, Ganges Canal. The central causeway acts as a partition between the drainage waters from each side of the Pass. Ample waterway is or will be provided for these waters by clearing away the slopes of the hills. The causeway is protected not only by strong masonry walls, but by an elaborate arrangement of wood-work and boulders, and there seems reason to believe that so soon as the whole scheme can be fully worked out, the expectations of the projector may be realised, and a stable road established. Meanwhile, however, even my short inspection of it leads me to anticipate occasional casualties to parts of the works in their incomplete state, though these are not likely to prove permanent obstructions. At present, however, our concern is less with the professional merits of the project than with its influence as a means of relieving a large mass of starving people.

6. The entire civil charge of the workpeople, including therein provision for supplies, sanitary and medical arrangements, and all the police of the various camps, was entrusted to Mr. W. Duthoit, C.S., Assistant Magistrate and Collector of Shaharunpore. The executive duties were directed by Captain Ross and a staff of assistants. The

number actually emyloyed at the time of my visit was 18,183. They were scattered in separate parties along a distance of about seven miles. Grass huts were provided for them, and supplies were in abundance at rates which made their subsistence wages sufficient to ensure healthy sustenance for all. The general aspect of the people, however, I am constrained to say, was very wretched. They looked wasted away, and were quite incapable of any really hard work. The children, as usual, showed the marks of famine most strikingly, and I saw some very sad examples of utter and apparently almost hopeless exhaustion among them. Generally, however, the people seemed willing to work and cheerful in spirits. I saw no cases of that mournful moral prostration so common among the helpless paupers of the relief-houses, and the sickness was remarkably small. On the day of my visit there were but 32 patients in the hospital, a number below what might have been expected from even a collection of 18,000 people in average health. All the internal arrangements of the camps seemed to me most carefully and thoughtfully provided for, and the details of payment and the like were all managed without the slightest confusion or difficulty. Altogether I received the impression that Mr. Duthoit and Captain Ross, each in his own special department, had their work thoroughly in hand, and that the largest amount of good of which a relief work was capable was being effected by their agency.

7. The strictly local extent of such good is curiously illustrated by some of the details obtained by me. Of the total number of 18,183 employed, no less than 15,653 were from the district of Shaharunpore alone, leaving but 2,530 for other districts of the famine tract. Within the district of Shaharunpore also the influence of the work is distributed in a very anomalous way. The sub-division (pergunnah) of Deobund, for example, occupied mainly by Rajpoots, and having a population of about 109,000, sends only 927 people to the works, while Shaharunpore, from a population of about 103,000, sends no less than 5,458. Yet we know that the pressure of the famine was far more intense in Deobund than in Shaharunpore. It is not distance only that determines this marked difference, as we find sub-divisions even further off than Deobund sending their full proportions, and the cause of the anomaly is no doubt the tribal prejudices of the bulk of the inhabitants against relief in the form of public works. The Goojur sub-division of Gungoh sends only 45 people out of a population of about 63,000, while Behut and Fyzabad, which together have only the same number of inhabitants, send 997. The six districts of the Meerut division send altogether 17,385, while 16 districts of other divisions send only 798. I have little doubt that like proofs of the strictly local influence of relief works will be found on analysis of the returns from those in progress in other districts, and the point is one of practical value. Bijnore and Umballa being the nearest districts to Shaharunpore, not belonging to the same division, send most; the former supplying a contingent of 430, the latter of 283. As regards caste, by far the largest proportion was from the common village labourers, next came the native weavers, while all other castes were represented by a mere fraction of the whole number.

8. A curious custom as found to have very general prevalence among the workpeople, whereby a sort of rotation of relief was established.

Families whose meagre home resources were not wholly exhausted, adopted the plan of dividing themselves into two sections, one going to the work for a certain time, while the other remained at home. After a time the working section returned to the village to which the whole belonged, and the party hitherto employed there took their turn on the works. In this way, and by a perfectly spontaneous action, the relief was spread over a sensibly larger surface than it could otherwise have covered, and the daily employment of 18,000 people would thus represent the actual relief of probably 25,000 or 26,000. The trait is a pleasant one, too, in reference to the people themselves, as it shows they did not willingly sink into even that degree of pauperism implied by the receipt of subsistence wages, but were ready to do the little they still could for themselves.

9. My inspection of the works in the Mohun Pass amply confirmed the general conclusion to which I had been previously led relative to the healthy efficiency and success of the system as administered in the North-Western Provinces. But it also confirmed quite as conclusively my impression of the great and inevitable costliness of works so executed. It was impossible to look at the excssive proportion of worn and wasted frames among the crowds of workpeople, and to suppose that out of such more than a very small amount of labor could be taken. The work generally was very irregular in form, scarcely admitting of any accuracy of measurement, but I saw no cause to question the correctness of the statement made to me, that the cost of the work was rather more than quadruple than of like work executed under ordinary conditions. The usual rate for such work is four rupees per 1,000 cubic feet. The actual rate, as nearly as it could be estimated, was Rs. 16-2-0. It is clear, therefore, that of the whole outlay on the road about one-fourth only is productive in work done, while three-fourths are purely charitable expenditure, the results of which are to be seen only in the slowly growing strength of the masses of people gathered on the works.

RELIEF WORKS EXCLUSIVELY FOR WEAK-BODIED LABOURERS.

(Light Labour Gangs.)

RELIEF WORKS FOR INFIRM LABOURERS.

Contract system wherein inapplicable at times of positive famine.

ORISSA FAMINE ENQUIRY COMMISSIONERS, PART III.)

75. In case of moderate scarcity which affects only the habitual workers for wages, increased public works in the ordinary form may do good, but it is most amply shown by experience that the moment there is anything approaching to general famine—the moment in fact that serious want is at all wide-spread—public works conducted in the ordinary manner, by contract at ordinary task rates, are quite inappropriate and unavailing. In every such case there should, we think, always be a special and entirely distinct arrangement for famine works, under which the wages, whether in the form of daily or of task-work payments, the provision of food, and the whole of the system, should be adapted to the employment of large masses of people to whom such labour is *not* habitual. Especially things should be so arranged that every individual who applies, and especially every woman, should have immediate employment without reference to any gang system which may render them dependent on the will of others, excepting so far as they voluntarily accept such an arrangement. We think that such works should never be placed under the same executive officers who at the same time superintend other works conducted in the ordinary manner. Special works should be superintended by special officers, who must fully understand that they must divest themselves of preconceived notions, and must adopt an entirely different standard of professional duty.

Necessity of separating the relief works for the Able-bodied and for the Infirm. Not much danger of crippling agriculture.

76. Above all things it must be remembered that, as we have said in the former part of our report, all substantial public works are the relief of the more or less able-bodied; that if a certain point of suffering is passed before special works are made effective for relief, they are useless. In that case either the attempt to obtain any considerable return for the money expended drives away the starving, or the work that can be required is nearly nominal, and the money spent is almost as much lost as if given away gratuitously. Much care and discretion and foresight will always be required to ascertain the point at which special works should be commenced. They are, however, in this country probably less liable to abuse than in some other countries. We doubt if,

without great laxity, it would ever be found that in India, as in Ireland, [1847] the whole population would desert agriculture for easy public labour, and would resist a return to the ordinary labour to which they are accustomed, when there is a demand for it. It will therefore be better to make special arrangement too early than too late. By judicious tests the abuse of public labour in doubtful cases may, we think, be prevented.

No single set of rules universally applicable. Discretion as well as rules.

77. It might perhaps be expected that we should frame a set of rules by which the indications of famine may be measured, and relief, when famine arrives, may be undertaken. We believe this to be wholly impossible. The subject is in some respects not a very wide one, that is to say, many of the same features seem constantly to recur in all famines. Human nature is to a great degree the same in all countries with which we have any intimate acquaintance or respecting which we have means of information; and the same conditions constantly give rise to the exactly same questions and to similar phenomena whether in Bengal, in Madras, or in Ireland. But, if we may so express it, the same circumstances are differently combined on every separate occasion, just as a few pieces of glass in a kaleiodoscope, although in themselves always the same, are combined in an infinite variety of grouping with every shake of the instrument. Everything so much depends on the particular conditions of the occasion, that any standard that we could frame would probably mislead, and might induce officers to substitute a too mechanical obedience to rule for that intelligent apprehension of the subject which we believe to be not difficult. For we repeat that the elements of famine are much the same everywhere. It is entire ignorance of the whole subject which produces disaster. We would recommend that the most essential parts of the reports on great famines, both in India, in Ireland, and elsewhere, should be collected and circulated in an easily accessible form, and that reliance should be placed on intelligent officers, to whom the gravity of the subject will now, we trust, be apparent, to acquire that knowledge which will enable them to work out in practice results far more satisfactory than could be obtained from any rules or models of conduct.

The dilemma of relief works. How to relieve seasonably yet without disturbing private industry, and effectually yet without demoralising the labourers.

83. If famine can be anticipated, it may in a great degree be forestalled by the judicious provision of public labor, and when it has actually appeared in the form which we have indicated, measures of direct relief must be taken. When relief has commenced, the skill and intelligence of local officers must always be again tried to the utmost. The conduct of the measures required in famine seems in all parts of the world to involve a constant nice steering between Scyllas and Charybdis of a character many times repeated. If special relief works are commenced too early, the ordinary labour market is disturbed without

necessity; if too late, this most legitimate of all modes of relief becomes, as we have said, nearly useless. If daily pay be too freely given, the people of all countries when employed for charity will struggle to do next to nothing. If task-work is rigidly enforced, without the means of making it practicable to all, the object of relief may be defeated. If task-rates are too hard, they are injurious; if easy in the extreme, it is probably impossible to vary such rates according to the capacity of individuals, and the stronger labourers are enabled to earn far too easy gains, from which it is difficult to wean them. We cannot say that any one system should be followed under all circumstances. Every thing must depend on individual skill and discretion.

Task-work unsuitable.—Alleged repugnance to labour.

[Report of Orissa Famine Enquiry Commissioners, Part I, para. 242.]

Although there were no special works for relief, the ordinary work on the road was carried on in the usual manner. That mode is to work by a system of petty contracts wholly unfitted for relief in times of famine. The contractors make their profit, and under them the work is carried on by gangs, who do hard task-work. Neither under the contractors, nor when working direct under the Government officers, is it possible to measure the work of each individual labourer. He or she must belong to a gang who work in common. Their common work is measured, and the money is divided. Hence an individual wishing to earn a livelihood must first obtain admission to a gang; the gangs will not admit a labourer who from weakness is unable to do a full day's labour, and, above all, they will not or cannot admit more than a certain proportion of women and children, since these ordinarily do not dig, but only carry. Throughout these events by far the greater number of the applicants for relief have been women and children. Many of the able-bodied men went away to seek more profitable labour in less famine-stricken districts, leaving their wives and families behind them. For people so situated the ordinary form of public works is of little avail. Mr. Windle, the Executive Engineer of Balasore, distinctly tells us that the ordinary task rates allowed did not suffice to provide a sufficiency of food when rice became very dear and the people emaciated. His work was not in the station, but at a distance, where it is admitted that it was very difficult to procure rice. It is evident that for the relief of famine, works must be very specially arranged. And our opinion is that obstinate and prejudiced as in some respects the Ooryahs are, those of them who are accustomed to labour have not, as has been sometimes supposed, shown, as a rule, an extraordinary determination to refuse work when it has been offered to them under favorable conditions, though many have starved without seeking work at a distance, and some unaccustomed to labour may have starved rather than accept labour close at hand. We apprehend that in England, the classes unaccustomed to manual labour would suffer much before turning out with their wives and their daughters to carry earth, especially if they must live in gangs on some distant road-side. It was still more so in Orissa. The truth is that

Government employment was at this time offered under very unfavorable conditions.

In Mr. Shortt's report of 1st September he says—"Plenty of labour can be had for rice. Reports are sent that labour is not to be had in sufficient quantity; the meaning is simply that those who require the labour have only money to offer in payment; the money is valueless since it is unable to provide the recipients with the necessaries of life."

LIGHT LABOUR RELIEF WORKS.

[Orissa, 1867. From Mr. Hobhouse's Report.]

The origin of this system of relief was as follows:—At the centres there were congregated persons in every stage of physical condition. There were male adults capable of doing a full day's work, and other such persons; and also women and youths capable of some work but not of a full day's work. Again, every day during the early months of the year, there were added to the centres men, women, and youths,—sick, emaciated, infirm, and unfit for work. But cleanliness, medical attendance, and sufficient and good shelter, food, and clothing, soon, yet by degrees, rendered these fit for some work, fit for full work; and those fit for no work, fit for light work; and it was observable that the moment work in any suitable shape and to any forcible degree was given, the physical condition and the discipline of the persons relieved at the centres improved *pari passu*, and it became a question how to dispose of persons fit for full or for light work, so as to give to such persons employment suitable to their physical condition, to make such persons earn the whole or in part their own livelihood, to lead them gradually back into their ordinary employments, and to discharge them from time to time out of the centres, so as for the time to make way in these centres for others more deserving of relief, and ultimately to clear and close the centres altogether.

This was the origin, and these the objects of the light labour system, and the method of it was this. All persons capable of a full day's work were excluded from light labour altogether, and were drafted on to works under the Public Works Department or under the East Indian Irrigation Company. All men, women, and youths, capable of light out-door labour, were put into gangs, were housed in the nearest centre, or in portable camps, were put to work of some kind or other, say earth-work under the Public Works Department. The work was done on the piece-work system. Overseers superintended the gangs, receiving a percentage after measurements of work done. The Relief Committee contracted to do the work at so much per 1,000 cubic feet; but the workmen did not do a full day's work, and were yet paid per man rather more than the ordinary full day's pay (the pay, that is to say, given by the Public Works Department and the East India Irrigation Company), either in money or in rice. The loss apparent upon this system, the details of which will be found in the Rules, Appendix XIV, was the loss of the Committee.

No doubt the system was open to much abuse. There was a difficulty in getting persons from the centres into the light labour gangs

at all. In one instance they refused to work in them, and returned clamouring and threatening to the centre whence they had been drafted. In another instance they fled the centres where the system was being introduced, and flocked to other centres where it had not yet been introduced. Then, when they once were drafted into the light labour gangs, it was as well their object as the object of their overseers to keep them there, and thus many able-bodied labourers, whose services would have been available and valuable for full day's work to the Public Works Department or the East India Irrigation Company, were kept in comparative idleness and uselessness, and at higher rates on the light labor gangs; as for instance, on one occasion, at Bonomalipore, where in one day no less than 350 persons were found in the light labour gangs, capable of doing a full day's work. And again on another occasion, when in the breaking up of a light labor gang, no less than 3,000 persons were said to have sought employment on the Government embankment.

But on the other hand, even light labour was found, in one instance at least, to have been too much for the emaciated physical condition of the labourers; and even so early as the beginning of May, daily inspections were made by trustworthy persons of the light labour gangs, and all those persons capable of full labour were carefully weeded out and drafted into the Public Works Department or to the East India Irrigation Company's works.

And the system, as a whole, worked well; many persons in the centres were obviously and for a long period quite unfit for a full day's work. It was better, morally and physically, to give them light work rather than no work at all. As they became capable of light work, they were drafted out of the centres, and the centres were to this extent temporarily, and at last permanently, thinned. In the light labour gangs they to some extent paid their own way, resumed their former habits of industry, and gradually regained health and strength. When capable of full day's work, notice to quit was given: and they either disappeared of their own accord, or were drafted into regular labour; and so became merged once again naturally into the population.

The following abstract shews the financial result of the light labour system, and the number of persons relieved thereby, viz.:—

District.	Total number of persons relieved.	Total cost.	Receipts.	Net expenditure.	Average cost of each person per month.
		Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Cuttack	44,243	1,12,346 11 5	58,754 0 2	53,592 11 3	1 3 4
Pooree	3,872	12,521 15 1	6,887 7 0	5,634 8 1	1 7 8
Balasore	9,834	20,347 0 8	6,286 11 8	14,060 5 0	1 6 10
Total ...	57,949	1,45,215 11 2	71,928 2 10	73,287 8 4	1 5 10

Considering the novelty of the system, the abuses to which it was open, the large number of persons to supervise, the comparatively small

agency for supervision, the unreliable character of a part of that agency, and the necessarily unrepaying value of a part of the system, the Committee trust that the system as a whole may financially be considered to be as small a loss as was possible, and the Committee at least think that Mr. Kirkwood, the originator of the system in Orissa, is entitled to every praise, as well for the conception of it, as for the energetic, zealous, and, for the purposes of the system, effective, mode in which it was carried out.

Light labour gangs (task-work) in Cuttack, 1867.

MR KIRKWOOD, RELIEF MANAGER.

Light labor relief.

This relief held a most important place in the general scheme. It took its stand intermediate between gratuitous relief on the one hand, and labour on the regular departmental works on the other. Several gangs were formed of people (mostly women) unable to procure a livelihood by work on the regular department works, yet not fit candidates for admission into the *unnochutters*, or to the benefits of the village relief. Each gang numbered from 1,500 to 2,000. Remuneration was given on the task-work system at a rate considerably above the current departmental rates, and hutting accommodation was provided. The people prospered, and with the cheapening of rice, either went off home, betook themselves to work in the fields, or had recourse to regular departmental work. By the middle of November this relief had been closed.

The Establishment for each Light Labour Gang comprised an overseer (first of all appointed on commission only, and subsequently on commission and fixed pay of Rs. 20 per mensem), 10 sub-overseers (on commission), subsequently changed to khallasees on Rs. 6 per mensem, 1 mohurrir on Rs. 15, and two peons on Rs. 5.

Works executed by light labourers.

The works executed by the light labourers were almost urgently required. It was far from being a case of having to make work for them. The following were some of the works executed. * * * It is probable that but a very small portion of the extra labour we secured under our light labour system would have been utilized under the regular departmental rates. The people that found a refuge in our gangs would mostly have starved at those rates and have finally come on our gratuitous lists.

The light labour and the full labour gangs.

It has been found in the late Orissa Famine to be a most healthy and beneficial arrangement to provide work other than earth-work for such as those who, by reason of caste or custom, decline to engage in labour of that nature. These works for light labours gangs ought to be administered by a Relief Department and entirely separated from the full labour works carried on by the Public Works Department. With regard to departmental works, they should form a field for the employment of all able-bodied male workers and of such women as prefer to frequent them. Women, as a rule, are unaccustomed to earthwork, and, therefore, I would not drive them, though able-bodied, from the relief

gangs; anything that they may save by the higher rate there obtainable will have been well expended, for, as a rule, they would be those who have become widows or have been deserted by their husbands. Those women having husbands or male relations on regular work would prefer to go and labour with such at the regular departmental works rather than betake themselves to the light labour gangs and obtain a higher remuneration. When in a time of famine the rate of food rises to an abnormal height, the rates for regular work should also be increased. The Public Works Department in Orissa during the year 1867 increased its rate by about one-third with immense advantage to those whom it supported. We should thus have (1) the regular department providing for the able-bodied males and such females as choose to frequent their works, paying them at slightly enhanced rates; and (2) the special relief works under an entirely distinct establishment of officers.

Hutting for light labour gangs.

The fit candidates for this latter sort of employment would be all females from the strongest to the weakest, all children, and such males as may be unfit for regular work. These should be hutted on the work. The huts should, both for sanitary reasons, and to prevent the necessity of constantly moving them, be placed not in groups, but in a straggling fashion along a considerable length of work. I would not have big sheds but would secure greater privacy by smaller huts. These should be light, water-tight, and capable of holding some 8 or 10 persons; in fact, in all respects similar to the huts already advocated for housing the recipients of gratuitous relief. Those living in each hut should form a small and separate gang; and some 200 of such small gangs should form a distinct large gang, to be supervised by a separate staff of officers. The gangs would have to be as frequent as circumstances may require, so as to enable all who may desire work to find it at no great distance from their homes.

Extent of payment to beginners.

Colonel Baird Smith expresses an opinion that (1) the wages given should be calculated at the lowest rate needful for subsistence, and (2) that on special relief works no specific rates can possibly be fixed. On the first point I would remark that such a course, as tending to keep the recipient of charity in a weak and emaciated state, and to preclude the possibility of his making any attempt to save, only prolongs the period over which relief has to extend, whereas a more liberal rate enables the recipient to gain in strength, to purchase clothing, and, may be, to lay by a few pice with which to start again in life. When they have achieved this much experience, they will, as shown in the greater number of cases, return to their former homes, if there is a possibility of their obtaining some more congenial employment. A liberal rate becomes actually the cheaper policy, shortening the time during which it is necessary to continue the relief.

Specific rates of payment.

With regard to the 2nd point, we have in the Cuttack District succeeded singularly well in the working of our light labor system, and have, with one or two unimportant exceptions, always given specific rates

payment. When a person in a very weakly state joins a gang, he has generally been given food or money sufficient to enable him to support himself for a few days. During this interval he does some work, little it may be, and earns something; this saving helps him to eke out the earnings of the next week. During the fortnight thus got through he has probably gained sufficient strength to enable him to subsist on our rate without any extraneous aid. The rates were fixed so as to be capable of sustaining the weakest; the weakest have invariably improved after a short time, and any other class than the weakest have been able to earn sufficient, in proportion to their strength, to subsist well, to buy clothing, and even to save. This effected, they, as I have said, generally leave their gangs for their homes.

Cheering influence of this light labour relief contrasted with the extreme depression of gratuitous relief without labour.

With reference to the necessity of weeding out from the recipients of gratuitous relief all able to do any work, Colonel Smith remarks, Part II, Para. 6, in speaking of the light labour gangs:—"Generally, however, the people seemed willing to work and cheerful in spirit. I saw no cases of the mournful moral prostration so common among the helpless paupers of the relief houses." This fact cannot be too strongly asserted, especially where the system of relief houses and cooked food obtains. No matter what form gratuitous relief takes, it has in all but the worst cases somewhat of an enervating effect, or rather has not the tendency to raise the spirits, and increase the strength that manual work of some nature so emphatically has. The very effect of work does a wonderful amount of good. I think I may safely say that it has been found that when once a person gets into a light labour gang improvement begins; when into a relief house (as often as not), deterioration. This remark, though losing much of its force by the abolition of relief houses, would still in some way apply generally to all gratuitous relief in return for which no labor is exacted.

Task-work preferable to daily wage system.

I * cannot agree with Colonel Baird Smith in the advantage of a daily payment, irrespective of the amount of work done. Such a course is, I think, open to grave objections; it offers no incitement to work, and directly fosters idleness. Task work, I think, should be the only system adopted; a man earns more, it may be, but he requires more; a woman less, but she requires less to maintain and increase her strength. The importance of maintaining the reliance of the people on *their own* efforts cannot be over-rated. A money wage is undoubtedly preferable to a food wage (*vide* Colonel Smith's para. 23), but then food must be made procurable. Even though earthwork be more actually remunerative, the people of India will never, not even, as appears from Colonel Smith's report, under the influence of high pay and little or no work required, desert their fields when the time has come for cultivation or harvesting.†

* Mr. Kirkwood, C.S., Relief Manager, Cuttack.

† Compare page 85 the opinion expressed by the Orissa Famine Enquiry Commissioners, that in India with judicious tests at relief works there is little danger of labour being unduly diverted from agriculture or other occupations. The same opinion is expressed in other reports *passim*.—J. G.

Rates of light labour payment adopted in Cuttack district.

Comparing the financial result of our light labour system by task work with the result shown by Colonel Smith, in Part II, Para. 9, our system would appear to have a decided superiority. With the price of rice at 12 Calcutta seers per rupee, we fixed our rates at Rs. 3-4-0 per 1,000 cubic feet of earthwork, and this rate was increased to Rs. 5-2 in the worst months of the rains. The average rate from March to December may be put down at Rs. 4-3 per 1,000 cubic feet.

The work was of the nature of excavating canals, constructing embankments, roads, and such like. Allowing half a seer of rice to be sufficient to support a woman, we find that, with rice selling at 12 seers, if she could earn a daily wage of 3 pice she could subsist. To earn this at the rate of Rs. 3-13-6 she would have to do 12 cubic feet of earthwork. The weakest may in some cases have been unable to complete more than this: but the average work of the woman employed was much nearer 20 feet, and this gave room for the purchase of salt and other necessaries. Subsequently the price of rice fell to 16 seers and 20 seers per rupee, and more than mere subsistence became not only possible (it was possible before) but probable. I do not take into calculation the increased rate we gave during the rains, as that was merely a set off against the days on which work was impossible and idleness compulsory.

Comparison with D. P. W. rates.

The ordinary Department Public Works rate (not that prevailing during the year 1867) is Rs. 2-4 per 1,000 cubic feet; with our average rate then at Rs. 4-3, a loss of Re. 1-15 on every 1,000 feet of work done was incurred. Add to this 5 annas per 1,000 feet for excess measurements, and 6 annas per 1,000 feet for earth thrown out of alignment, &c., and we have the loss augmented to Rs. 2-10; add again 2½ annas per 1,000 feet for hutting, tools, and such like expenses, and 1½ anna for extra establishment, and we have a total loss of Rs 2-14-0. In other words, the cost of the work executed has been slightly more than double of what it would have been under ordinary circumstances; it has been almost exactly 127 per cent. in excess of what the cost of the work would have been in an ordinary year. But the work executed by our light labour gang—all work of a most urgent nature—had it been undertaken by the regular Department during the year 1867 would have cost not Rs. 2-4 but Rs. 3 per 1,000 cubic feet. The actual difference then between the cost of the works executed by us and those of the regular department was only Rs. 2-2-0 per 1,000 cubic feet, or 73 per cent. on their current rate.

Influence on the health and morale of the labourers.

Under such an arrangement the people prospered wonderfully. There was always a certain percentage of them in hospital incapacitated from work by ulcers generally on their feet and legs arising from abrasions which neglect and an unhealthy state of blood converted into festering sores. But with this exception I know of no sickness that has prevailed extensively in our camps, and, such as it was, it can scarcely be said to have exceeded that generally to be found in a large

concourse of ordinary labourers. On the other hand, Colonel Baird Smith's description of the relief gangs (Part II, paragraph 6,) on which payment was made by a daily wage irrespective of the quantity of work done, "the general aspect of the people, I am constrained to say, was very wretched. They looked wasted away, and were quite incapable of any really hard work," does not convey a notion of very marked or rapid improvement. In paragraph 9 he states that financially the loss on the special works had been very great, the cost of the works having been quadruple that incurred in ordinary times; and this estimate would appear to be exclusive of any allowance for defective measurements, cost of hutting, &c.

Light labour gangs (task-work) in Cuttack, 1867.

Summary.

Light labour system.

As has been already stated, the course to be pursued by the authorities on arriving at the conclusion that a famine is imminent is, first of all, a speedy commencement of special relief works under an agency entirely separate and distinct from the ordinary departmental establishment.

Who are to be admitted to this relief.

The officer entrusted with the conduct of relief operations in the district becomes, as far as special relief works are concerned, a contractor, and receives from the department for which the work is executed remuneration at the rates then current. It lies with him to pay his labourers at such an enhanced rate as to enable them to purchase a sufficiency of food not only to maintain but to increase their strength. Under such circumstances the first imperative condition is that he receive into his employ none but those deserving of a greater measure of relief than that extended by the regular department. His labourers will be women and children, and such men only as by reason of age or other infirmity, or from being reduced by starvation, are unable to execute such an amount of work as would at the departmental rates enable them to earn a sufficiency for their support.

Women, even though physically able, should not be excluded.

I do not think that in any severe crisis it would be advisable to reject women from special relief works on account of mere physical ability. Women do not as a rule employ themselves on earthwork; the exceptions are those who work along with male relatives, and such would never, I think, desert their friends, nor, even under the inducement of higher wages, go to the special works where they would frequently have to live at a distance from their homes and apart from their families; nor indeed would their male relatives permit them to act thus, for women when working in company with men generally perform the more tedious part of the work. While the men occupy themselves in digging, women have to carry off the earth and that often to the special relief works would be almost invariably those whose male relatives had either deserted them or died. They are a deserving class, often having to support not only themselves but young children, and any extra remuneration they may obtain would be well expended. Male

children, up to the age of 12 or 13, should be allowed on the works; when older than that they should, if physically able, be rejected.

The system approved of task-work.

I would remark that the system of daily payment, irrespective of the amount of work done, as recommended by Colonel Baird Smith, was attempted in Orissa at the commencement of the year 1867, but its financial results were so unfavourable, and the habits of laziness and recklessness it engendered so palpable, that it was speedily given up for a system which, taking into consideration the entire want of experience that every officer connected with the operations laboured under at their commencement, has been worked with gratifying success as regards the objects of the relief and the financial results. Rules for the conduct of this relief are discussed and laid down in the sequel. [See below.]

Mr. Kirkwood's rules for light labour gangs (task-work).

(CUTTACK 1867).

The employment to be earthwork of the nature of road or bund-making or repairing, inclusive of dressing and turfing where necessary.

2. Not more than 2,000 people to work under any overseer.

3. The staff required for the superintendence of their work is as follows:—

1 Overseer.
5 Khallasees.
1 Mohurrir.
2 Peons.

4. The overseer to receive monthly a percentage on the amount of work done, at the rate of (1) one anna for every 1,000 cubic feet of earthwork done; (3) three pie (one pice) for every 1,000 superficial feet of dressing done; (6) six pie (2 pice) per every 1,000 superficial feet of turfing done, and also a fixed monthly pay of Rs. (20) twenty. The mohurrir to receive a fixed monthly pay of Rs. (15) fifteen. The khallassees (who should be selected with considerable care, and with reference to their previous good character) should receive a monthly fixed pay of Rs. (6) six or (7) seven. The peons to receive Rs. (5) five a month.

5. The establishment to be paid regularly every month, and any deduction from the overseer's commission that the D. P. W. measurement may show to be necessary should be made from his next month's pay and commission.

6. The Overseer to give security for Rupees on his appointment, as security against any defalcations.

7. An equal proportion of the number in the entire gang should be placed under each khallassee. Those under each khallasse should be allowed generally to arrange themselves in gangs of 5 to 10 each.

8. Huts of suitable description should be provided for those who are at a distance from their homes; these should, as well for sanitary reasons as for the convenience of the people, not be grouped together, but scattered over the whole length of the work.

9. The light laborers should be paid in cash at the rate of one pice for every 4 cubic feet of earthwork done or Rs. 3-14-6 per 1,000 cubic feet, Re. 1 for every 1,000 superficial feet of dressing, and Re. 1-12 for every 1,000 superficial feet of turfing, provided that

grain is obtainable at a rate* which would enable a daily wage of 3 pice to ensure subsistence.

10. The duties of the Overseer are to be constantly on the work, to see that the work is properly executed, to see that none who are not fit recipients of relief are employed on the works, and to admit to the work all such applicants as are deserving of relief. He will himself measure up the work, entering with his own hand, in a book provided for the purpose, the measurement of each excavation, the amount paid for it, and to whom paid. He will pay the money with his own hand to those who have executed the work at the time of measuring it. He will also exercise a general supervision over the hutting arrangements, and the health and condition of the labourers. He will have to keep up Register B (and, if necessary, Register A); and also submit Returns C and E regularly on the 1st and 16th of each month: the Register B for the preceding month must always be despatched on the 1st of each month to the District or Relief Manager. The Mohurrir will help the Overseer in his accounts, &c.; each khallassee will be constantly present on the work, and should have a hut provided for him on that portion of the work which may be under his superintendence. The khallassees will have to see that the work is regularly and properly executed in accordance with instructions given him; that no unfit recipients of relief are employed on the works; that the labourers' huts are kept in a good state of repair; that the people are cleanly in their habits. He will also have to report all cases of serious sickness to the nearest relief hospital. He will be in charge of the tools issued to those working under him, and will give them out every morning, and will have them returned into his custody every evening before dark. He must take great care that the tools are all given in at night, and must be ready to issue them in the morning at dawn.

11. If the measurement of the work (as returned by the D. P. W. every month) is either unaccountably less than that of the relief Overseer, or if the work is reported as so badly executed as to be evidently the result of culpable negligence, a just deduction should be made from the Overseer's commission and pay. If the commission and pay should not suffice for the deduction, the balance should be taken from his deposit.

12. The work of half the people working under him should every day be measured up and paid for by the Overseer. Every person employed on the works should get paid once in (2) two days.

13. Payment will be made to each sub-gang for the work done by it; the members of a sub-gang (probably consisting of 5 to 10 persons) will select one of their number to whom payment should ordinarily be made for distribution.

14. The people should, as a rule, be allowed to form themselves into sub-gangs. A new arrival, however, should be placed by the Overseer or khallassees in charge in gangs with those of the same caste, and if possible, of the same village.

15. The greatest care must be taken that no able-bodied men are admitted to the works; women will not ordinarily be rejected; male children up to the age of 12 or 13 should be allowed on the works.

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* Elsewhere stated at 12 seers per rupee.

[Here four rules about tickets are now omitted Mr. Kirkwood says. Though good theoretically, they are, I believe, practically impossible. The tickets get lost or destroyed, the trouble and annoyance in replacing them are great; the notion is distasteful to the people and tends to keep away from the gangs many deserving of relief. If the enforcement of any such measure be attempted, a separate officer on say Rs. (20) twenty per mensem must be added to the establishment of each gang solely for the purpose of carrying it out.]

16. On the 1st and 16th of each month all men able to do a fair day's work, should be carefully picked out, and, in charge of a peon provided with a chellan of their number and names, sent to the nearest D. P. W. works.

17. When Government has undertaken the importation of grain, if the works are not being carried on in the neighbourhood of a sale depôt, rice should be sent on to the works on two fixed days in the week, or oftener, and should be sold at the Relief Committee's rates. When circumstances are not such as to necessitate Government undertaking the importation of grain, the demand caused by the labourers will generally attract a corresponding supply; in any case where it does not, it will be the duty of the Relief Agency to provide a grain shop near the works.

18. The Department (D. P. W. or other) whose work is being executed should pay to the Relief Fund the value at their current rates of the work done. This payment should be made immediately after the monthly measurement.

19. Some agent of the Department, on whose works the light laborers are employed, D. P. W., &c., should visit the work occasionally and approve or disapprove of the way in which it is being executed; he should also measure up the work done during the month on the last day of each month (if it is completed during the month) on the date of its completion. Adherence to regularity in the monthly departmental measurements is most necessary, as without it the relief overseer's measurements and payments must go in a great measure unchecked.

20. The overseer to get his percentage on the work as measured up by the D. P. W.

21. On the 1st of every month a Return in Form D. should be submitted by the Department for which the work has been executed.

22. All Inspecting Relief Officers must, on visiting any relief work, call for Return C. and see that it is entered up to date; he must also inspect Register B. (and A. if kept up); see that each page bears the signature of the overseer, and, by measuring two or three excavations here and there, test the accuracy of the overseer's measurements, and by questioning the labourers, test the correctness of the overseer's payments. In any case where cheating is apparent, the circumstances must be at once reported, and the necessary documents sent to the District Relief Office.

23. The people will provide their own baskets—tools will be provided for them.

24. All returns and reports to be submitted to the District Relief Manager.

Returns A. and B. referred to a system of tickets which Mr. Kirkwood has deprecated, and they are therefore omitted.

Return C.*

(Fortnightly: to be despatched on 1st and 15th of each month.)

Column 1.—Place and date. 2.—Number of people at work at end of last fortnight. 3.—Number of men. 4.—Of women. 5.—Of children. 6.—Number dismissed (daily) during the fortnight. 7.—Number admitted (daily) during the fortnight. 8.—Number of people at work at close of each day, viz. 9, men; 10, women; 11, children.

12.—Description of work. 13.—Amount of work done during the fortnight. 14.—Average daily work of each person (obtained by dividing column 8).

15.—Amount of money in hand at end of last fortnight. 16.—Amount of money received during the fortnight. 17.—Total receipts. 18.—Expended in payment of light labourers. 19.—Other expenditure exclusive of pay, commission, &c. 20.—Total expenditure. 21.—Amount left in hand. 22.—Remarks.

Return D.

(Monthly).

Column 1.—Place. 2.—Amount of work executed during the month as per D. P. W. measurement. 3.—Description of work. 4.—Rate per 1,000 cubic feet. 5.—Amount due to the relief fund. 6.—Remarks.

Return E.

(Fortnightly).

1.—Place. 2.—Number of tools in hand and description of tools. 3—Received during the fortnight. 4.—Number of tools missing or number broken, and number worn out during the fortnight. 5.—Number of tools fit for use. 6.—Number of tools required. 7.—Remarks.

Mr. Kirkwood's notes on the above rules (abridged).

Rule 4.—The percentage originally fixed (2 pice per 1,000 cubic feet of earthwork done, and no other pay) was found to be too low. The gangs in many cases did not number 2,000, so that the commission seldom exceeded Rs. 20 per mensem. A great advantage would be secured by obtaining trustworthy and able overseers. Peculations and false measurements by overseers, during the relief operations of 1867, added about 6 per cent., and work thrown out of alignment about 46 per cent., to the cost of the work done; at a much lower percentage than this a really trustworthy agency might be obtained. During the latter part of the year a fixed monthly pay of Rs. 20 was given to the overseer in addition to the percentage stated in Rule 4. This was found to work well, but even this did not make the pay sufficient. I have therefore altered the rule to: the overseer to receive a percentage on the amount of work done monthly at the rate of one anna per 1,000 cubic feet of earthwork done, and also a fixed monthly pay of Rs. 20. This

* Note by compiler.—I extract the various headings recommended by Mr. Kirkwood, because they will serve to indicate the points to be noted for control. But the return seems too lengthy, and Mr. Kirkwood in another passage says his forms might be improved. The portions relating to 1st, number of labourers; 2nd, outturn of work; 3rd, money transactions; which I have distinguished above in separate paragraphs, might be dealt with in separate returns.—J. G.

would make the appointment a valuable one, as the remuneration would be Rs. 60 or more, per mensem. Nor would this be too high a rate of pay considering the amount of money that has to pass through the overseer's hands, and the responsible position he holds. The greatest care should be taken to pay him and his establishment regularly. The fixed monthly pay should be regularly paid at the beginning of the next month, and the commission paid on the overseer's returns when received. Any deduction which it may appear advisable to make when Statement D. has been received, should be made from the next month's pay.

RULES 7, 8.—The gangs should be allowed to arrange themselves in sub-gangs of 5 to 10 in each. It was found practically impossible to keep them to any fixed numbers, and they work much better when allowed to work in families or with friends. If the number in the gang is 2,000, then one khallassee should be attached to each 400 persons, and so on. Huts should be provided for those labourers who are at a distance from their homes. These should, as well for sanitary reasons as for the convenience of the people, not to be grouped together, but scattered over the whole length of the work. Each hut should accommodate about ten persons. It should, however, be borne in mind that in no case would it be necessary to provide hutting accommodation for the whole gang, as many would have homes of their own in the neighbourhood.

RULE 9.—The original rate, 2 pice for every 10 cubic feet, was found too low, and was early raised to 1 pice for every 4 feet, or Rs. 3-14-6 per 1,000 cubic feet. This latter rate continued from April 1867 to the close of the operations, with the exception of the month of July, when, owing to the heavy rains, the rate was raised to 1 pice for 3 feet. It must be remembered that it is as injurious to the recipients of the relief as to the funds provided for general relief operations to increase the rate above that which will afford subsistence, and enable a slight saving to be made. Any higher rate will probably only meet with increased laziness on the part of the workers, and, as experience has shown, a diminished outturn of work. This remark may, perhaps, not apply with the same force to other people as it does to the Ooriyas. The rate (1 pice) for every 4 feet was found a very suitable one with rice selling at Rs. 3-4 per Calcutta maund, or 12 seers of clean rice per rupee. At an average of 20 feet per diem, this would provide half a seer of rice for three pice, one pice for other necessaries, and one pice might be saved. Any excess over 15 feet per diem would probably, in the case of an adult, represent the amount saved for purchase of clothing, baskets, &c. Any lowering in the price of food would effect an increase in this saving. When the price of food should fall to a rate approximate to that obtaining in ordinary years, there would probably be no continued necessity for special works. In any case, where the people may appear excessively emaciated, the rate may, with advantage, be temporarily increased to 1 pice for every 3 feet, or Rs. 5-3-4 per 1,000 cubic feet. For dressing Re. 1, and for turfing Re. 1 12 per 1,000 superficial feet, were found suitable rates. I may here compare the relief extended by our works and those of the regular department. The D. P. W. nominal rate had been raised to Rs. 3, while ours were Rs 3-14-6 per 1,000 cubic feet. But

of the Rs. 3 given by the D. P. W., the authorized deductions made by the contractors for baskets, &c., would leave only about Rs. 2-12 for the laborer. With us, then, the amount reaching the laborer would be about 40 per cent. in excess of the remuneration obtainable under the D. P. W.

RULE 10.—It cannot be too strongly insisted on that the overseer should himself measure up the work, and, in his own hand, enter in a book the name of the head of the gang, the amount of work executed since the last measurement, and the amount paid. For this purpose he should be provided with ten books of a shape easy to carry, each containing 100 leaves. Of this book each leaf should bear the signature of the District Relief Officer, and each book should be fastened with his seal, the cover bearing a certificate as to the number of leaves contained in the book. This book should be forwarded at the end of each month to the head district office, and a new book should be opened. Of the two peons given to the overseer, one should always accompany him on the works, for the purpose of throwing the measuring rod; the overseer will then record the measurement, make out the sum due to the gang, and pay it then and there to the head of the gang. The other peon should be employed in carrying money on to the works, &c. The measuring rod, with which the measurements are made, should first of all have been tested by the District Relief Officer, and if found correct, should bear some mark to that effect. No other measuring rods than those so tested and approved should be allowed on the works. Any Relief Officer visiting the works should examine the measuring rod, ascertain that it is a passed one, then take the overseer's book, and, by measuring two or three excavations here and there, check the measurement of the overseer, making a note in the book in any case where incorrectness may be detected, and reporting the same to the District Relief Office. He should also investigate as to whether the amount entered has actually been received by the gangs. A method of cheating, which was discovered owing to a dispute in the division of the booty, was the following:—The correct measurements were entered, and the amount of money entered as given away was the amount that should have been disbursed for the work executed. But the amount so entered did not agree with the amount actually received by the labourers. On this discovery a heavy fine was inflicted. Foiled in this, another device was adopted by the same man, and this time a somewhat more ingenious one. The entries on first sight appeared correct, that is, the amount entered as given away to the labourers was the amount actually received by the gang. On measuring the work, the measurements entered, though slightly less than the actual amount of work done, did not appear wilfully false, owing to the work being somewhat irregular, and the overseer being liable for any amount he might pay away for work in excess of that actually done, but then a sheet of paper was discovered wherein the difference between the less measurements entered and the actual work done was calculated to a nicety. And this was the *modus operandi*. When the work of, say some 500 labourers had been measured up, a total was made of all the differences between the actual amount of work done and the measurements entered, and one or two entries made of fictitious excavations, the measurements of which being added, brought up the

total to the actual amount of work done. A fictitious name was entered against these excavations, and the amount due for them was calculated correctly and entered. This then represented the sum daily misappropriated by the overseer and his confederates, and it was obtained not by cheating their employers, but the labourers employed under them. I believe that in no other instance than the one now mentioned were the laborers defrauded to any considerable extent.

The khallassees should be in charge of the tools, &c., each of them should have a separate hut near those working under him, and every morning at dawn he should issue the tools to the heads of the gangs, and every evening before dark the heads of the gangs should give back the tools into his charge. The overseer will be held responsible for the tools, and he will, in his turn, have to hold the khallassees responsible.

The necessity for having the tools returned at night is the opportunity that would otherwise be afforded to the male relatives of those working in the gangs, and others of the neighbouring villages coming on the works at night and executing the work for the light labourers, exacting from them in payment for such work somewhat less than the full remuneration, but still a rate considerably above that given on the regular works.

In addition to having the custody of tools, the khallassee will be charged with the duty of seeing that the work is regularly and carefully executed; that no unfit recipients of relief are employed on the works, that the laborer's huts are kept in a state of repair, that the people are cleanly in their habits. He should live on the work; all cases of serious sickness should be reported by him through the overseer to the nearest relief hospital. In any case where unfit recipients of relief are found on the works, the khallassee should be severely punished, as he will most probably have taken a bribe to admit such persons to the works. If huts are judiciously scattered along the whole length of work instead of being crowded together, there will be no necessity for any special conservancy arrangements.

The mohurrir should be employed by the overseer in the way most useful to him, as in keeping accounts, making up returns, and such like.

RULE 11.—If the work (as returned by the departmental agency every month) is either unaccountably less than the relief overseer's measurements, or noted as having been badly executed, a just deduction should be made from the overseer's commission and pay, and if this should not suffice for the deduction, the balance should be made up from his deposit.

If any concession is subsequently made by the department a corresponding concession should be made to the overseer.

RULE 12.—The work of half his gang should be measured up and paid for by the overseer every day.

RULE 19 should be strictly adhered to. In the Cuttack district the delay by the departments in measuring up the work done for them has, through the partial filling up of excavations during the rains, and the washings from embankments, been productive of much confusion, and the measurements of the relief overseer have consequently gone practically unchecked till check was no longer of any utility.

RULE 23.—Baskets should be provided by the people themselves, This is the only way to make them careful. If baskets are given them

they will be broken up for firewood, lost, or thrown away within a few days. They, moreover, present the overseer with an opportunity for making false and uncheckable charges. If the people find them for themselves the cost is very trifling, probably ½ an anna per mensem for each person.

Light labour gangs in Balasore, 1867.—Daily wage and task-work.

[MR. RAMPINI, C.S., RELIEF MANAGER.]

Light labour gangs.

I now advert to the employment of the paupers in light labour gangs. This, I think, with the exception of sales of rice, has been the most efficient of all the means of relief in operation this year. During the month of March, the paupers were principally employed in unremunerative and unimportant works, such as trifling roads about the towns and useless river bunds. Towards the end of that month, however, and chiefly through the exertions of Mr. Irwin, the sub-divisional officer, better arrangements were made, and gradually the paupers were told off in gangs to work on the Rooknadaipore, the Agurparah, and the Dhamnugger roads. All these were works of importance, which it would be a boon to the sub-division to complete, and they ran through the part of the country where distress was most severe, and therefore gave extended employment where it was most needed. Further, as for the construction or repairs of these roads, special grants had been either allowed by Government, or provision had been made in the usual District Road Budget, the value of the paupers' labour could be recovered from the Collector. The people were at first found so utterly disorganized and unaccustomed to restraint that it was impossible to introduce a strict task-work system. The system of daily payments at the rate of 1½ anna for men, 1¼ for women, and one anna or ¾ anna for children, was retained for some time. Latterly, as a more efficient establishment was obtained, and as the paupers became more accustomed to labor and discipline, payment by task-work was introduced, but as the gangs were weekly replenished by draftings from the relief centres, (poor-houses) there was always a considerable number from whom only a very nominal work could be expected.

The Rooknadaipore road is a line of about 10 miles long running from Bhuddruck direct to Rooknadaipore. the port, so to speak, of Bhuddruck. It is an important road, from the Government rice import golah being at Rooknadaipore, and because it is the principal line of road by which the large manufactures of salt find their way from the coast inland. By the time the light labour gangs ceased working on this road, in the end of October, 7 miles and 3 furlongs of a road, 18 feet broad and 3 feet high had been thrown up and dressed, rammed and sodded. The cubic extent of the earthwork thrown up amounted to 8,73,398 feet. The total expenditure on this road came to Rs. 4,960-8-3, and the value recovered from the Ferry Fund Department to Rs. 2,690-3-4.

The Agurparah road runs from Bhuddruck to Agurparah at the foot of the Nelgiri Hills, and is important as opening up this tract of

country. The light labour gangs constructed 2 miles and 196 feet of the road, the amount of earthwork thrown up coming to 371,169 feet, the expense to Rs. 2,799-5-2½, and the value to Rs. 1,185-12-6. Early in July, a light labor gang was started on the Kolah and Motah road, running through Killah Kunika, parallel with the coast. By the end of October, when the gangs ceased working, 2 miles and 4 furlongs of road had been completed, 188,103 feet of earthwork thrown up, at a cost of Rs. 115-3-4, the value recoverable from the Ferry Fund Department coming to Rs. 501-1-9.

The light labour gangs were still working on the Dhamnuggur road when the year closed, but this was chiefly on account of the exhaustion of the Ferry Fund Department funds, which prevented that Department taking over the pauper laborers to their work. On this road, by the 31st December, nearly 2 miles of road had been completed, 4,72,304 feet of earthwork thrown up, the value of the work done amounting to Rs. 1,221-1-1 and the cost to Rs. 2,422.

One of the principal reasons of the costliness of the work of these light labor gangs has been that the laborers have been almost entirely females—unaccustomed and averse to the use of the *kodali*—and most unwilling to cut the earth in *chowkas*, in which way alone the amount of their work could be tested. This difficulty, however, lessened in time, and latterly the women have worked with as good a will, if not with equal energy and skill, as their male co-workmen.

Ajmere, 1869.—Contract system with subsidies to contractors according to percentage of infirm labourers on the works.

(Colonel Brooke, Governor-General's Agent.)

The poor-houses at Ajmere, Nyanuggur, and other places in the district had been opened before the end of 1868, and were thronged with the helpless and starving. The people attending them were, of course, unable to work on the Public Works, as they were only fit to be tended and nursed and not to labour. Many who went to find work fell down and died before they had commenced, and others expired with the first exertion of lifting a spade or mattock. When in this condition, they were taken care of till they could be sent to the poor-houses.

Work for weak and infirm poor.

The District Civil Officers were anxious to procure some light work for those who gradually regained strength; application was made to the Lieutenant-Governor, North-Western Provinces, and readily acceded to by him, for an advance of Rs. 50,000 for this purpose. All the Civil Officers and gentlemen available afforded their superintendence, and light earthwork was given to those deemed capable of exertion. The work was only roughly marked out, so that the result of the labour could not be shown, and the grant became a charitable donation on the part of Government, no adequate return being received for it. The work was chiefly digging a little earth out of the Ajmere and other lakes and a little earthwork near the poor-houses. The full sum expended amounted eventually to Rs. 73,170-14-6, besides the cost of grain procured from Agra, which was given to the poor in place of corn [*sic*, money ?]. The grant of the grain and money without an adequate return

drew off numbers from the Public Works so long as the plan lasted. The rations were full rations, larger than what was given at the relief works, whilst the labour was nominal. The rations furnished numbered 929,642. The cost of Government grain (4,810 maunds) was Rs. 27,016-0-10, making altogether an outlay of Rs. 1,00,186-15-4. The Deputy Commissioner stated that the rates reported were subsistence, and the daily work by no means commensurate with the actual value at those rates. About nine miles of road were superficially executed, and a couple of passes were put into excellent order, besides the excavation of earth in two reservoirs at Ajmere. The average cost of each ration was 1¾ annas.

After the wheat crop of 1870 was reaped, all special famine labour was brought to a close. The total number fed by the relief works under Government orders and the cost may be stated as follows :—

Number of people employed on famine relief works during the continuance of the famine, and the cost.

Months.	No. of labourers employed daily.	Cost.	Months.	No. of labourers employed daily.	Cost.
		Rs.			Rs.
September 1868 to March 1869	9,500	2,69,000	September 1869 ...	9,100	18,500
			October ,, ...	7,600	31,300
April ,, ...	20,700	77,900	November ,, ...	5,100	43,100
May ,, ...	20,900	74,700	December ,, ...	3,100	13,300
June ,, ...	17,000	75,200	January 1870 ...	3,900	35,000
July ,, ...	12,300	52,000	February ,, ...	5,100	14,500
August ,, ...	12,000	48,000	March ,, ...	7,500	7,500
			Total of 19 months ...	10,000	7,74,000

During the whole of the 19 months that the famine lasted, the officers of the Public Works Department were indefatigable in their duties. The poor had to be fed on Sundays as well as on other days. The works were all regularly planned and supervised, and the result has been an admirable system of roads, which the Ajmere and Mhairwarra districts so much needed.

Amount paid to poor at famine relief works.

The amount paid to each person only supplied him with a scanty meal. The cost of grain was so high that women and children could only get 10 to 14 ounces of dry grain, and able men 16 to 18 ounces for their day's labour, hardly sufficient to keep them alive, but yet so great was the pressure that the poor crowded to the works. When more favorable times came, the above low rates did not offer inducement enough for them to remain.

Allowance made to contractors for loss by famine labour.

The allowance made to the contractors for the labor of the feeble poor varied according to the work done. The practical result was, that the earth work cost 6 per cent. more than it would otherwise have done. This was more than covered by the 5 per cent. for contingencies, which it is customary to allow on the gross total of every Public Works estimate. Moreover, as the works progressed, the feeble poor who had become strong came upon the "able" list and did not affect the schedule rates so much. The extra cost paid to

contractors by Government for executing the works as famine relief works was as follows :—

	Rs.		Rs.
September 1868 ...	1,200	July 1869 ...	600
October „ ...	1,800	August „ ...	600
November „ ...	2,600	September „ ...	900
December „ ...	2,300	October „ ..	1,500
January 1869 ...	3,000	November „ ...	2,000
February „ ...	4,400	December „ ...	200
March „ ...	3,600	January 1870 ...	400
April „ ...	3,700	February „ ...	1,200
May „ ...	900	March „ ...	1,300
June „ ...	900		
		GRAND TOTAL	33,100

Government by the energy and skill with which the works were carried on thus saved the lives of a large body of people at an extra cost to themselves of only Rs. 33,100, exclusive of the enormous benefit conferred on the country by opening up several useful lines of road.

Amritsar, 1869.—Daily wage system.—Rates of payment and outturn of work.

(FROM REPORT BY MR. COLDSTREAM, CIDED BY MR. LEPEL GRIFFIN IN MEMOIR ON THE PUNJAB FAMINE.)

The rate of wages has been on the chief works 1½ annas to adults, male and female; 1 anna to children over ten years of age; and 6 pie to children under 10. These rates vary from those stated by Government of India in its 'memoranda of measures approved' to be used, in making no distinction between the pay of adult men and adult women and in giving children over 10 one anna instead of 6 pies. The rates adopted commend themselves, as, for this part of India at least, more fair and equitable. The city ditch work at Amritsar was started at a two anna rate for men and women, but this was obviously excessive, as new applicants, in crowds, continued to throng the work after the rates had been lowered. The wages of women, however, were reduced about the beginning of April to 1 anna, and then raised to 1¼ anna. The reduction in wages did not lessen the attendance at the works.

Towards the close of the operations, and with a view to bringing the work to a conclusion, a one anna rate for adult men was adopted. The immediate effect was a reduction in the average per head of work done and a large decrease in attendance.

I have been careful to go into these facts regarding the rate of wages on our principal works, because a fair estimate of the proper rate wages during such a crisis may be formed from them; and your of Committee deem that the rates adopted were those under the circumstances most suitable, viz.—

	As.	P
Adults—male and female	1	6
Children above 10, ...	1	0
Do. under 10, ...	0	6

The average cubic feet per head for all famine works was 19 ; and this is nearly double what was accomplished at the Amritsar works, where the average was only 10 cubic feet. This rate is unquestionably low. At such work under favourable circumstances an able-bodied man ought to accomplish his 100 cubic feet per diem. Nevertheless, the causes of this small amount of work done are easily found.

The proportion of women and children was more than 50 per cent. Women with children in arms were allowed to earn their mite, and children of tender years carried their tiny loads to swell the household earnings.

Though there was a fair proportion of able-bodied labourers, yet undoubtedly the old and feeble were numerous ; and charity forbade the rejection of any one able to work at all.

The season was a very trying one to work in. The fierce summer sun prevented anything like active work during a great portion of the day.

The burning heat had the effect of hardening the ground near the surface to such an extent as to render it very difficult to break. This was particularly the case at Sariali where the ground was so baked that 10 strokes of a mattock hardly cut one inch into the ground. At the same time, when the work was closely supervised by a European officer, the daily average of work rose greatly. Thus, in his report for the week ending 13th February, Mr. Macpherson states that he spent one day at the works, and under the direct supervision of himself and Mr. Nicholl the work-people did more than usual; the average per head being 22 cubic feet; but this result, says Mr. Macpherson, cannot always be obtained, as personal superintendence cannot be given daily. I think it may fairly be concluded that had strict supervision been employed a considerably larger amount of work would have been done by the gangs; and had the committee, at the commencement, anticipated the dimensions to which these operations would attain, they might wisely have arranged for more effective superintendence.

The following account of the organization of the working parties on the Amritsar city ditch works has been supplied by Mr. Vaughan :—

The proportion of men, women and children employed on the work, from a detail in Mr. Vaughan's report for the week ending the 20th March, appear to have been as follows :—

Men,	about	...	...	six-thirteenths.
Women,	,,	...	...	four-thirteenths.
Children,	,,	...	...	three-thirteenths.

On the Amritsar ditch works, Rs. 12,819-8-9 had been spent, giving day's a wages to 1,19,331 persons, of whom 50 per cent. were men and the remainder women and children.

The Hariki road works started for the relief of the population of the Manjha employed 96,840 people. The work performed was 22,54,003 cubic feet, an average of 23 cubic feet per head, a high average compared with Amritsar, and accounted for by the fact that the work consisted principally in dressing embankments and not in excavation. The class of people employed was, moreover, agricultural, more accustomed to out-of-door labor than the Amritsar paupers.

DAILY WAGE SYSTEM.

Results in Salem and North Arcot, 1866.

(From report by Mr. Ellis, c.s., Sanitary Commissioner, Madras, on special duty.)

The special relief works which have been organised in both the Salem and North Arcot districts, consist in :—(*a*) the construction of a few useful cross-roads, and short feeding roads to railway stations; (*b*) the repair of roads already in existence; (*c*) the repair of irrigation works, such as tanks and channels; (*d*) the deepening and repair of wells and tanks used for drinking water; (*e*) planting trees by road sides, and inclosing and trenching spaces of jungle, with a view to the protection of trees most useful for fuel.

Works already in progress under the Public Works Department for which estimates had been made and sanction obtained, gave on the first occurrence of the distress considerable occupation to the poor, and before the funds allotted to these works were exhausted, the special relief works were commenced.

In both districts there were local funds available, and these have been judiciously expended in those parts of the district where distress was most prevalent.

The wages in the Salem and North Arcot districts have varied from two annas to two annas six pie for men coolies; for women, the wages have been from one anna to one anna six pie; and for children from six pie to one anna.

It has been possible to bring the works within tolerable easy reach of the suffering villagers, and it has not been necessary to hut the gangs of workmen.

The congregation of great numbers of workmen together during a time when epidemic cholera was more or less prevalent, has, been wisely avoided. Many of the works, such as the repairs of tanks and channels, will be directly remunerative, and will bring an increased area of land into cultivation. The number employed on the works has been subject to considerable fluctuation. Whenever rain has fallen, numbers have left the works to resume, as far as possible, the ordinary agricultural operations of ploughing, sowing, and weeding; these operations concluded, a considerable number return to the road or other works; this causes little inconvenience to the works which have been purposely designed, not as being emergent, but as affording relief to the agricultural classes who are thrown out of work by the adverse season, and the great loss of cattle which has so greatly circumscribed the area of cultivation in these districts.

The cost of the special relief works in the North Arcot district is estimated at one lakh of rupees, which will provide labor until the end of December. In the Salem district 50,000 rupees have been specially sanctioned by the Government for relief works, and a large proportion of this sum has been devoted to small irrigation works, such as the repairs of tanks and channel. A considerable extension of relief

works is, I think, required in the Salem district, where prices are rising and distress increasing. I venture to suggest that the Collector should be assured of the support of the Government in the energetic extension of all useful works which can for the next few months afford employment to unskilled labour.

As stated above, I cannot pretend in this report to give any very accurate estimate of the probable total cost of the relief works in either of these two districts.

Favorable weather which would give an impulse to the ordinary agricultural labour, may cause the works to be partially deserted; an adverse season would, on the other hand, cause an influx of persons seeking employment.

In these districts, as in others, where special relief works have been organised, there has been considerable uncertainty as to the principles to be observed.

The true principles have, some years ago, been very clearly laid down by Colonel Baird Smith, in his admirable report on the famine of 1860-61. As it may, perhaps, be necessary to continue employing large numbers of the able-bodied poor for some months, I beg to quote what Colonel Baird Smith has said upon this subject, which will, perhaps, prove useful to those engaged in organising labour under the present peculiar circumstances:—

"The primary condition of admission on relief works is, that applicants shall not be so helpless as to be unfit for ordinary labour in digging, carrying, and the like; if they are so helpless, they properly fall under charge of the agents for the relief of the helpless poor, but they would be improperly placed on special relief works."

* * * *

"All people then willing to give labor in exchange for wages are admitted on these works. The wages given are calculated at the lowest rate needful for subsistence, and for that only. Profit on labor that is not wanted, but is a mere drug in the market, is wholly out of the question. It is, in a pecuniary sense even, at least a very expensive method of working, for the average capacity of the workers is much below that of ordinary laborers, and the cost of work so executed must always be high; but no middle course exists between employing those people and maintaining them. They certainly cannot support themselves, and it is better far to accept the high rates of work consequent on their employment, than to let them subside into the class of helpless poor, or die. It is clear that on special relief works no specific rates can possibly be fixed; they must range from very nearly the entire cost of subsistence to the rates due for ordinary labour, according to the comparative working capacity of the people employed, and may, at any time, show fluctuations dependent on this capacity alone, and thus be wholly beyond the control of the officer in charge. Some officers have tried to work within limiting rates, but it is only practicable to do so systematically by overlooking the fact that wages on special relief works are subsistence wages only, and cannot be retrenched for short work without starving the work-people. It is remarkable, however, how well and cheaply, amid all the difficulties of the case, an energetic officer can execute special relief works; but this comparatively satisfactory result cannot be

obtained by reducing wages; it depends on close personal supervision, on the careful adjustment of tasks to strength, in the formation of working parties, so that the strong and the weak may each have just the kind or quantity of work they are best fitted to do. In this way the best may be made of the system, but at best it will never be an economical one; it, however, returns in labour a sensible proportion of the cost of maintaining the people, and what is perhaps of more importance, it teaches them to continue reliance on their own capacity to work as their best means of subsistence, and maintains their self-respect by keeping them above the position of helpless paupers."

Jhansie,* 1868-69.—System of daily wage and tickets. Labourers (23,000) regimented.

Arrangements made on Soomera tank, Lullutpore.

The work-people are told off into regular gangs of convenient number, each having its proportion of excavators, diggers, carriers, &c., and each under two or more mates or superintendents. Each gang has its separate flag. In the morning the work-people are assembled by sound of a native trumpet, *rumtoolla*, when they fall in regularly in gangs at their several flags, and are mustered, each person receiving a ticket upon which the sum he or she is to receive is stamped. As the muster of each gang is completed, it marches off to work. In the evening the trumpet gives the signal for ceasing work. The people again fall in regularly in their gangs, and are mustered by their officers. Seated in regular lines like the companies of a regiment, they wait silently while the names are called over by the mohurir who pays the wages. Each person as called delivers a ticket, receives the equivalent in pice, and immediately moves off to a temporary bazar established close by, and exchanges the money for grain at the rate of a quarter of a seer higher than the price current in the town for the day. The number of tickets collected by the mohurrirs are the check upon the amount expended. Mr. Finn is present both morning and evening and all payments are made in his presence. * * * The people, though many of them very wretched, emaciated, and poverty stricken creatures, look contented, good humoured, and grateful.

Jhansie,* 1868-69.

MR. J. INGLIS'S REMARKS ON THE LULLUTPORE SYTSEM, MARCH 1869.

In Lullutpore there are upwards of 23,000 employed on the relief works, and 4,200 in the various poor-houses. Of the 23,000 at work, 10,300 are employed close to the town of Lullutpore. They are divided into gangs of 50, each gang having its number and flag. Each persons receives a ticket in the morning, which has to be given up in the evening when pay is distributed. I saw this immense crowd, consisting principally of women and children, march in, take their places, and receive their day's pay in less than three-quarters of an hour. While the people

* From Mr. Henvey's report.

were being paid, Colonel Davidson went through the crowd listening to any request or complaint they had to make. This is done every evening at each of the works by the officer in charge, and as the people have been told off to gangs with distinct numbers, any complainant is readily traced afterwards. Shops for the sale of grain of all kinds have been set up, at the places where the people are paid by two of the leading graindealers, and grain is sold there to the poor at a quarter of a seer above the rate ruling in the bazaar. The same arrangements regarding the payment of the people and their division into gangs are in force at all the relief works in the district. On my way to Jhansie, I saw the people employed at Bansee, 14 miles from Lullutpore, about 7,000 in number being paid, and found them equally orderly and carefully looked after. The poor-houses are visited every day by one of the members of the Local Committee of the place where the poor-house is situated. As the people admitted become fit for labor they are drafted off to some of the relief works in the neighbourhood. Those who are not fit to send out to work are employed in basket-making and twisting rope. * * * About three-fourths of the people employed are women and children, the greater number of these having been deserted by the men who emigrated to Malwa when the failure of the khureef became certain.

They have been employed on the works for some months now. and will be dependent on their earnings from this source till July or August next. The clothes they had at first are nearly worn out now, and they are unable to purchase others. Mrs. Davidson has clothed 750 from a fund raised for the purpose by private subscriptions, but there are still many more who require clothes.

Ajmere, 1869.—Captain Repton's Light Labour Gangs. Tickets and daily wage.

On every famine work commenced the officer in charge will state the number he has employment for. On receipt of this, the tehseeldars will enrol labourers, register their names, ages, and residence, and give them each a certificate, and send a copy of the register to the officer in charge, the copies having on the reverse columns for attendance on the days of the week: and the work men are divided into gangs of 50 each under a headman. At 8 A.M. each headman musters his gang, and the time-keeper corrects them, and gives a corresponding number of ticket-vouchers to the headman, striking out the names of those absent on the copy of the register. When work is over, the gangs are again mustered, and each headman gets tokens in exchange for the ticket-vouchers he gives up. This is repeated daily till pay is issued, viz., on Sunday, when the copies of the register are made over to the pay disburser, who calls up each individual, and in return for the tokens given up gives so much money.

RELIEF WORKS FOR INFIRM LABOURERS. (LIGHT LABOR GANGS.)

Bijnour, 1868-69.—Mr. H. Ross' Scheme of Labour Relief.

The party to be divided into gangs of twenty composed as follows: —five men with *phowrahs*, ten women and five children. Each gang to be under a regular *beldar* on two annas a day, whose duty it is to dress off the work, and be responsible for the quantity done. The mohurrir in charge of the party has to measure off plots of work for each gang of twenty. The quantity varies with the nature of the road, &c., but, as a rule, between 40 and 50 running feet of roadway must be completed. The mohurrir must have all names entered in his register by 9-30 A.M.; no names to be entered after that. I am obliged to make this rule to enable a check to be kept. Without it, when the Engineer, myself, or other officer arrived suddenly on the ground to check the lists, and found any names omitted or extra names entered, the mohurrir could say, "I have not completed the lists," or else "the others are coming."

Extract from a letter dated 12th December 1868, cited by Mr. Hewey.

Bijnour, 1868-69.—Rates of payment and outturn of Work.

Cost of works.

As it may be interesting to have a record of the prices paid for labour under the strictest possible supervision, a table of wages from February to October, 1869, is given here:—

Rates of Daily Wages at Bijnour.

Month.	Tindals.	Phoorah men.	Basket-carriers. Men.	Basket-carriers. Women.	Basket-carriers. Children.	Children without labour. With their parents.	Children without labour. Infants in arms.	Bhistees.	Sweepers.	Mohurrirs.
	A. P.	A. P.	A. P.	A. P.	A. P.	A. P.	A. P.	A. P.	A. P.	A. P.
February, 1869	2 0	1 6	1 0	1 0	0 0	.....	...	2 0	.	5 0
March, „	1 6 2 0	1 6	1 0	1 0	0 6	.....	...	2 0	..	5 0
April, „	1 6 1 3	1 0	0 9	0 9	0 6	.....	.	2 0	2 0	4 0 5 0
May, „	1 6 1 3	1 0	1 0 0 9	0 6 0 9	0 3	0 3	0 3	2 0	2 0	5 0
June, „	1 0	0 9	0 9 0 6	0 6 0 9	0 3	0 3	0 3	2 0	2 0	5 0
July, „	1 3 2 0	1 0	0 9	0 9	0 3	0 3	0 3	2 0	2 0	5 0
August, „	1 3 2 0	1 0	1 0	1 0	0 6 0 3	0 3	0 3	2 0	2 0	5 0
September, „	1 3 2 0	1 0	1 0 0 9	1 0 0 9	0 6 0 3	0 3	0 3	2 0	2 0	5 0
October, „	1 3 2 0	1 0	1 0 0 9	1 0 0 9	0 6 0 3	0 3	0 3	2 0	2 0	5 0

	Rs.	A.	P.
The cost of the district relief works was ..	1,20,877	14	9
Add—payments to contractors on district roads...	10,053	1	0
	1,30,930	15	9

Out-turn of work not commensurate with expense.

As to the out-turn of the work, it is generally agreed that, owing chiefly to want of skilled supervision, it bore a low proportion to the expense. Mr. Ross wrote:—"The waste has been fearful; I mean, if you take the actual measurements of work done, the cost is beyond all belief." "But," he adds—and this is the invariable apology for the expensiveness of operations conducted directly by District Officers—"there is no doubt but that hundreds of lives have been saved: all the *bunniahs* and grain-sellers say that, if it had not been for these relief works they could not have kept their shops open, as any grain exposed would have been stolen."

SUBSIDISED IN-DOOR EMPLOYMENTS,

ESPECIALLY

SPINNING AND WEAVING.

SUBSIDISED EMPLOYMENTS GENERALLY.

Orissa, 1867.—Mr. Molony, Relief Commissioner.

For men of classes that cannot accept earth-work, an effort may be made to employ them at their peculiar handicraft. Ordinary artizans, as a general rule, do not suffer so much in a famine as weavers; and, as they were a very numerous class in Orissa and persistently refused to abandon their trade and seek another livelihood, a large number of them perished. For this special relief the thread, woven by the women, was given out to be manufactured into cloth. By this means not only the men but the women and children were kept at work, and a great deal of misery averted. I have already expressed my opinion that the argument of interference with the ordinary course of trade, or of the inadvisability of bolstering up a declining trade are not applicable to such a crisis as a famine, and are of no force unless the objectors can suggest any better way of relieving a very numerous and suffering class.

Employment for Purdah-nusheen women in spinning.—Village (or Home) Relief.

[Moradabad, 1860-61.—Mr. John Strachey.]

26. *Relief of Purdah-nusheen women.*—It only remains to notice the system that has been adopted for the relief of respectable women, who cannot appear in public, and who consequently cannot receive food at the poor-house. There are no cases more difficult to deal with than these; not only is there the difficulty of guarding against abuses, but there is often the still greater difficulty of conveying relief in an acceptable form to the persons who are known to be in want of it. Women of the upper classes will only receive charity when all publicity is avoided.

It is not sufficient that they should not themselves be expected to appear in public. If they believe that the fact of their receiving charity is publicly known and talked about; that their names are entered in public registers, and their cases publicly inquired into, they will often prefer to die at home, rather than ask for relief. When the members of an infamous tribe, like the Goojurs, suspicious of our motives, because conscious of their own criminality, deliberately refuse the relief which is offered to them, it may be questioned whether we ought, for their benefit, to break through the principles which have been laid

down for the administration of public charity. For my part, I see no propriety in holding out to a tribe, which is a curse to the country, and whose sole serious occupation is crime, advantages which we cannot attempt to give to the honest and industrious poor. On this question opinions may differ, but all will agree that there are no people more deserving of our sympathy than these poor women, who are compelled, through no fault of theirs, to suffer in silence at their homes the privations of a time of famine.

27. *Plan of relief adopted.*—The management of the system of relief in these cases was entrusted by the Committee to Syud Ahmed Khan, the Principal Sudder Ameen of Moradabad. This gentleman, of whose admirable services I shall again speak further on, devoted to this duty the utmost care and intelligence. The results have been most creditable to him, and the objects that were arrived at have been attained in a manner that appears thoroughly satisfactory.

Lists were in the first instance prepared from the best procurable information, showing all the respectable women who were in urgent want of assistance, and who could not appear in public. These lists were carefully examined and checked by Syud Ahmed Khan. In the interior of the district, the tehseeldars and moonsiffs gave their assistance.

28. To guard against abuses in the administration of out-door relief to this class of women the utmost vigilance is necessary.

One of the most useful checks which can be adopted is the application of the principle which has been found so important in other parts of the relief system, that charity shall be, as far as possible, only afforded in exchange for labour. It is considered that a woman is able to spin daily, without much difficulty, one chittack of cotton-wool, and that an allowance of one anna per diem will provide her with sufficient food. A supply of cotton, enough for eight days' work, is enclosed in a small basket, and this, with eight annas in money, is sent to every woman who receives this kind of relief. After eight days have elapsed, a second basket with eight annas more is sent to her, and before delivering it, the first basket is taken back, filled with the thread into which the first supply of cotton has been spun. It was found impracticable, without frustrating some of the chief objects in view, to distribute daily the cotton and the wages for each day's labour. Thus, each woman receives an allowance in advance sufficient to maintain her for eight days. Under the careful supervision of Syud Ahmed Khan, the system has worked admirably; no difficulties have been experienced, and it is believed that no abuses of importance can have occurred. Relief has thus been given to a large number of women without any publicity, and without the least offence to their feelings Women who are considered to be incapable of any work, receive an allowance of nine pie per diem. This sum has been sufficient, at the prices which have prevailed since the system was introduced, to afford the means of subsistence, and the lower rate of allowance to women who perform no work provides a useful check.

29. *Results of operations for relief of purdah-nusheen women.*—On the last day of May, out of 1,105 women, 1,020 received relief in exchange for work, and only 85 were unemployed. The results in an

economical point of view have also been very satisfactory, as will be seen from the following statement of the operations carried on in April and May:—

Month.	Number of women receiving relief.	Average number of women each day.	Expended.			Quantity of thread prepared during the month.	Estimated value of thread prepared during the month.
			In money allowances to women relieved.	On purchase of raw materials, &c., for work.	Total.		
			Rs. As. P.	Rs. As. P.	Rs. As. P.	Mds. S. Ch.	Rs. As. P.
April	12,548	419	763 15 6	236 12 3	1,000 11 9	16 34 4	433 15 0
May	31,613	1,020	1,940 3 9	676 6 0	2,616 9 9	44 38 15	1,168 12 9

Thus, nearly 43½ per cent. on the expenditure was recovered in April, and nearly 44¾ per cent. in May.

Spinning Relief—Orissa, 1867.

[Mr. Hobhouse's Report, page xv.]

This mode of relief had its origin in the desire to find some employment suitable to the number of women at the centres, and to the still greater number of women with families at home in their villages, whom their husbands could not support, and who had not at their homes the means of procuring food, or the wherewithal to purchase it.

When the centres were first taken over by the Committee, it was found that the most numerous inmates were women. The husbands of these women had deserted them during the famine, in order to saving their lives by emigration. The homes of the women had thus been broken up; they had lost caste by resorting to the centres; they had become little better than prostitutes: their husbands would not, even if they were alive, return to reclaim them; they were without occupation; they were a mere burden on the centres, a charge unremunerative and troublesome.

The object then was, either to draft them out of the centres, or, at least, to give them occupation, and make them to some extent pay their way in the centres. If able-bodied, and otherwise fit objects for such labour, they were put to out-door labor in the light labor gangs, in carrying earth, in turfing and trimming roads, in laying or metalling, and so on. If not fit for such labour, they could at least spin cotton into thread.

But there was a most numerous and a more deserving class of women still requiring relief as urgently as the women at the centres,

and far better entitled to it:—Women who would not leave their homesteads or their families; women who would not resort to the centres to risk or encounter shame and degradation; women who could not appear in public at all without, in their eyes, the loss of honour; women who would willingly work in any not degrading occupations for their livelihood if they could get such work; women, who, from their husbands or other male relatives, had just enough to keep life together, but not enough to keep that life in health and strength.

In some cases it was necessary, and in all cases of this kind it was advisable, and a part of the Committee's aim, to keep these women still out of the centres, to support or to help to support them at their homes, and to make them pay towards the support afforded them.

No measure seemed likely to be so universally applicable, none in the result proved so remunerative, simple, and popular, as cotton spinning. Raw cotton was purchased and stored in large quantities at the centres. This was given out to all applicants. These persons took the cotton home, returned it in thread, and received money or rice in payment for the spinning.

This measure of relief did not take in Balasore; it was probably not wanted there, but in Cuttack and Pooree it was taken easily; at one centre there were no less than 200 applicants in one day, and such was the demand for it that at one time the Committee had it in contemplation to import from Calcutta so much of the raw cotton required as the local markets seemed unable to supply.

Weaving Relief—Orissa, 1867.

[Mr. Hobhouse's Report.]

The famine of 1866 had fallen with the greatest severity on the non-agricultural classes. At the worst, every male of the agricultural classes had his patch of cultivation, and by devouring this as it stood, he could just keep life and soul together, He was also an object of interest to his zemindar or to his money-lender; for if he left the land, the rents of the one and the gains of the other were gone. He could, therefore, generally get some slight advances, advances in the shape of rice, the usual shape in those parts.

But the occupation of the non-agriculturist, when all were struggling for the means of keeping life together, was gone; and there was one to care whether he lived or died.

Accordingly, this class suffered most during the famine, and was suffering most still when the committee began its operations. The weaver class suffered prominently; and the thread returned by the cotton-spinners suggested a method of relieving this class also. Accordingly, this thread was sold or distributed gratis from the centres to weavers. The weavers took it home and turned it into cloth; the cloth was brought by them to the centres, and was paid for in rice or in money.

This method of relief was almost equally popular, effective, and economical* with the spinning relief.

The following Table shews, in the abstract, the financial result of these two classes of relief:—

District.	Total number of persons relieved.	Total cost.	Receipts.	Net expenditure.	Average cost per person per month.
		Rs. As. P.	Rs. As. P.	Rs. As. A.	Rs. As. P.
Pooree	13,534	42,304 3 4	20,318 6 10	21,885 12 6	1 9 9
Cuttack	51,473	1,62,472 12 4½	1,00,500 6 5	61,972 5 11½	1 3 3
Balasore	3,766	11,484 9 6	4,204 12 6	7,279 13 0	1 14 10
Total ...	68,773	2,16,261 9 2½	1,25,023 9 9	91,137 15 5½	1 9 3

Spinning Relief—Pooree, 1867.

[Mr. Toynbee, C. S., Relief Manager.]

The help afforded by giving out cotton to poor women to be spun into thread has been one of the most successful of all the measures of relief. Not only has it, in some parts, repaid the expenditure incurred, but has also made bread-winners of those who would otherwise have been a burden on the male members of their families. Payment was at first solely in money (at the rate of 12 annas for each seer of thread given in), for it was anticipated that there would be a very large demand for the Committee's rice, and it was therefore deemed prudent, until the golahs had all been well stocked, to keep in hand as large a reserve as possible against the breaking of the rains. As matters improved, however, it became evident that this, however safe, had been a needless precaution, and payments were made at once in rice alone at the rate of seven seers clean and 10 dhanwa† for each seer of thread given in. From the date of this change the numbers relieved gradually began to fall off,—a fact which was regarded as affording conclusive evidence that there was still a considerable amount of country rice to be had, and that the condition of the people was steadily improving. The thread spun was not generally of a good quality, and, naturally enough, showed signs of hasty workmanship; but it was thought better not to give the mohurrirs a handle to extortion by allowing them to deduct a portion from the wages earned on account of bad workmanship. Besides there were many who, not having been previously accustomed to spinning, gave in thread coarser than those who, like most of the Musulman women, were skilled workers. It would have been manifestly unfair to have debarred the former from obtaining equally good earnings with the latter. The loss thus sustained is slight when compared with the good

* In Nudden 1866 it was estimated by the Magistrate, Lord Ulick Browne, that the weaving relief paid for itself, and involved no loss. (Orissa Famine Enquiry Commissioners' Report).

† [*Dhanwa, i. e.*, partially husked rice, the Burmah rice as distinguished from the clean or Bengal rice.—J. G.]

results of the measure. Partly on account of the inferior quality of thread, and partly owing to the impoverished state of the district, and the absence of any large mahajuns, the thread in hand has met with little or no sale, but has been readily disposed of when worked up into cloth.

Spinning Relief—Pooree, 1867.

[Mr. Toynbee, C. S., Relief Manager.]

Weaving relief.

The weaving relief was started simultaneously with the relief by spinning. Thread was issued to all weavers who applied for it, payment being made at first solely in money, at the rate of three pice and afterwards two pice per *hath*, one long by two broad, and subsequently in rice at the rate of six chittacks per *hath*. Although this relief only benefited a limited class, yet all the members of each family were enabled to earn something by assisting in setting up the loom, wetting the thread, and so on, and the same family often took cotton to spin and thread to weave at one and the same time. The cloths made have been of various qualities, but have all met with a ready sale at prices averaging Re. 1-4 per pair of eight *haths* long by two broad. The cloths distributed by the Committee to paupers were taken from the godowns, and were thus obtained cheaper and more conveniently than they would have been, if purchased in the local market. The amount of cotton and thread which has been misappropriated by spinners and weavers is comparatively small.

To guard against this kind of loss the mohurrirs were ordered to refuse further issues to the inhabitants of the village in which any defaulter lived, until the deficit had been recovered or made good, and of course every defaulter was barred from receiving further relief.

The Spinning and Weaving Relief, Cuttack, 1867.

[Mr. Kirkwood, C. S., Relief Manager.]

The spinning and weaving relief.

The other measures of relief that should be inaugurated may be fitly styled subsidiary. The two chief systems of relief, the gratuitous and the light labor, have been discussed and have been pointed to as meeting the majority of cases. But still there must remain a by no means inconsiderable number of persons needing relief, able to do some work, but prevented either by prejudice or physical inability from engaging in earthwork. There may also be a class of persons whose numbers, though few, call for attention, who, loath to eat of the bread of charity, are willing to accept of some relief if there be but a semblance of earning it for themselves.

In the late Orissa Famine the number of those who, though fit objects for relief, were either not candidates at all, or, if candidates, unwilling or unfit candidates for the gratuitous and light labour relief,

was perhaps unusually large. In any famine it will, I anticipate, be found that those falling into this class will be but few in number as long as the famine is not of excessive severity, but very numerous where the famine is severe and of long continuation. Their ranks are comprised of those who will bear the utmost amount of privation short of starvation before appealing for aid; those who hitherto have been well enough off to enable them to foster their prejudices in maintaining the seclusion of the females and the idleness of the males of their families; those whose ordinary trade is the production of the luxuries rather than of the primary necessaries of life. In such case it would be always well, if possible, to enable the skilled workman to support himself by the exercise of his own handicraft, and to provide work of the very simplest nature for those who hitherto have lived a life of laziness.

In the Cuttack district the class of skilled workmen that notably suffered the most was the weaving class, and these were, by the Relief agency, supplied with the means of supporting themselves by the exercise of their own trade.

The unskilled class that we had to provide work for were in a great measure, in fact almost entirely, comprised of women. In no other way was it thought that so extensive and simple employment could be provided as by employment in spinning cotton into thread. Other additional means of relief for this class of persons were introduced in other parts of Orissa, but not in the Cuttack district. In the Pooree district coir-rope was, I believe, made, but from the bulk of the material employed and the unsuitability of the work to the limited space afforded by a native, such a relief could never meet any but a small number of cases. The work of spinning is eminently suited to the employment of respectable females; they need never leave their homes; they can carry on the work in the most confined area, the work is one which may be said to be not entirely unknown to any native women, and which interferes with the caste prejudices of none.

I know of no other material so limited in bulk as cotton, affording scope for so much labor as spinning; and to this advantage must be added the fact that the labour is little obnoxious to any class of persons. Excellence in spinning is of course only to be expected from those whose regular trade it forms, but there are very few women who cannot spin well enough for the thread to be of some use. It would seem then, from these considerations, that spinning should always take a prominent part in the subsidiary relief introduced; and inasmuch as weaving is a trade common to all parts of India, and a trade that famine will always seriously affect, it may also be presumed that weaving will be a suitable employment in time of famine for a large class of very deserving persons.

This relief did not in any degree injure trade.

The spinning and weaving reliefs as carried on in the Cuttack district were, it may be thought, calculated to interfere with ordinary trade. But such was not the case. The distress that had so long existed throughout the district had enormously diminished the ordinary demand for clothing. The mahajuns could not sell their stocks

of cloth in hand, they could give little or no employment to the weaving classes, and hence little or no employment to spinners. The weaving class were thus entirely thrown out of employ, and I regard it as a most fortunate circumstance that we came to their relief when we did. If extra confirmations were required of the temporary absence of all demand for cloth, it may be found in the fact, that it was not till the gathering in of the beali (the early rice) and sarud (the late rice) crops placed some money in the hands of the ryots that there was any appreciable demand for our cloth, though we had all along offered it for sale at rates lower than the market rates. Even if we did call the occupations of weaving and spinning into greater activity than before, it is certain that the necessities of the time demanded some such step, and doubtless many who had hitherto led an idle life now first took to the loom or spinning wheel. But it is, I think, highly improbable that we induced any to quit other trades for these, and my reasons for so thinking are that no trade was equally injuriously affected by the famine, that the time during which our relief was in force was too short to induce such creatures of habit and custom as the Ooryas to forsake an old trade for a new one, and lastly, that I have known of no instance where such has been the case. The result has proved that the supply of cloth and thread produced has not been greater than the population would at once consume as soon as they found money in their hands. In fact what we did was simply to supply funds that the mahajuns ordinarily supply, and to remunerate for labor at an enhanced rate commensurate with the enhanced price of food. As soon as times began to better, and trade once more to show its head, we withdrew altogether from further interference.

The good effected by these reliefs.

The good effected by these reliefs has been immense, and the financial results were far from unsatisfactory. Not only were a large number of deserving persons provided with labour peculiarly adapted to their ordinary mode of life, and to the inclemency of the season, and thus enabled to keep themselves from starvation, and maintain their self-respect, but this result was effected at an expenditure by no means enormous.

Had there been the same amount of experience to work these systems from the outset as there would be now, were they again rendered necessary, it may be safely concluded that the results would have been still more favorable. Rules for the conduct of the spinning and weaving relief are to be found below.

Mr. Kirkwood's Rules for the Spinning and Weaving Reliefs.—Cuttack. 1867.

SPINNING RELIEF.—The principal relief officers in each district should arrange for the purchase of large supplies of cotton ; a contract should be entered into with certain merchants for a supply monthly at a fixed rate.

2. A Cotton Superintendent on a salary of Rs. 80 with an establishment on about Rs. 100 per mensem, should be appointed for the purpose of receiving over the cotton by weight from the merchants, storing it, and despatching it into the mofussil.

3. On receiving, the Cotton Superintendent should grant a receipt for the amount, and on that receipt payment should be made by the principal relief officer. To ensure the cotton being of good quality, and an adherence to the terms of the contract, the merchants, should each furnish Rs. 1,000 security. Probably after the mofussil golahs had been once supplied, 200 maunds of cotton would be required monthly in each district during the height of the famine.

4. Throughout the district, at distances of from 6 to 10 miles, golahs should be erected (on the same plan as the rice golahs, but smaller) for the storage of cotton, thread, and cloth.

5. Each golah should be furnished with an establishment, consisting of a darogah on Rs. 20 per mensem, a dandidar or weighman on Rs. 6, and a peon on Rs. 6. The darogah should furnish Rs. 100 as security for good behaviour and the honest performance of his duties. If rendered necessary, a mohurir on Rs. 15, and a dandidar on Rs. 6 may, in addition, be appointed.

6. The establishment formed, cotton should be at once despatched from the sudder store to the mofussil. For the purpose of obtaining the supply (which should generally be about 20 maunds at a time) the mofussil darogah will despatch one of his establishment, who will, on arrival at the sudder golah, have the cotton weighed out to him, and will grant a receipt for the amount; he will then convey the supply to the mofussil golah and weigh it over to the darogah, from whom a receipt should be taken. Any unaccountable deficiency that may have occurred in transit will be realized, if possible, jointly from the servant escorting the supply, and the carrier of the cotton.

7. The cotton arrived in the mofussil, and notice of its arrival and the remuneration offered to spinners and weavers having been circulated, operations will commence. The darogah will have to ascertain that any person applying for the cotton is in distressed circumstances. The operations of any one golah will seldom have to extend beyond a radius of six miles.

8. The darogah will keep up a register as follows: (1) name of person taking out the cotton; (2) residence; (3) caste; (4) quantity of cotton issued; (5) date of issue; (6) quantity of thread given back.

9. To each person no other quantity than one seer (Calcutta weight of 80 tolahs) will be given out at a time. From this 14½ chuttacks of thread should be returned. The value of any deficiency in the thread returned will be deducted from the spinner's remuneration. The thread must be returned within a fortnight of the issue of the cotton; no more cotton will be issued till the thread of the previous supply is returned.

10. The thread will be separated into four classes, Nos. 1, 2, 3, and 4; No. 1, very fine thread; No. 4, the very coarse; Nos. 2 and 3 will be intermediate qualities. The thread given in by each spinner should be tied up in a separate bundle, to which a ticket should be attached, stat-

ing the name of the spinner, spinner's number in the register, quality and weight of the thread, and the amount of remuneration given.

11. The remuneration given to the spinners should be made in cash if food is easily obtainable. If food is not easily obtainable it should be made in food. When food is obtainable at about three times its ordinary price, a suitable rate of remuneration would be the following :—For each chuttack (Calcutta weight) of thread given in of—

No.	1	thread	.. .. $\frac{9}{10}$ annas.
No.	2	do.	.. .. $\frac{18}{20}$,,
No.	3	do.	.. .. $\frac{14}{20}$,,
No.	4	do.	.. .. $\frac{10}{20}$,,

If the thread given in is short of 14½ chuttacks, for every chuttack short, ¾ anna, that is, the value of the cotton, should be deducted from the remuneration due on the amount of thread paid in. Thus, if 13 chuttacks No. 1 thread be returned, the remuneration to be given should be $13 \times \frac{9}{10}$ annas—$1\frac{1}{8}$ annas $= 8\frac{7}{8}$ annas.

In case food is not easily obtainable in exchange for money, the remuneration shall be in food. In such case the following rate of remuneration would be a proper one :—For each chuttack (Calcutta weight) of thread given in of—

No.	1	thread	.. .. $\frac{18}{40}$ seers clean rice.
No.	2	do.	.. .. $\frac{15}{40}$,, ,,
No.	3	do.	.. .. $\frac{12}{40}$,, ,,
No.	4	do.	.. .. $\frac{9}{40}$,, ,,

If the thread given in is short of 14½ chuttacks, for every chuttack short ¾ anna's worth of rice, at the current rate, should be deducted from the remuneration due on the amount of thread given in.

N.B.—Few persons spin so badly that it would take them more than a week to spin a seer of the coarsest description of thread ; and this rate of remuneration would, even if a person should take nine days, secure a daily allowance of half seer of rice. A wife who performed her household duties, and earned this in addition, would at least be no drag upon her husband ;—a widow could subsist on it.

If, however, 10 days are spent in spinning the No. 1 thread, the rate of remuneration will place the recipient considerably above starvation, supplying as it would nearly a seer of rice a day. The daily amount of rice furnished in the shape of remuneration would vary according to the quality of the thread given in from half a seer to one seer.

12. Weaving Relief.—The thread given in by spinners is to be issued to needy weavers for the purpose of being worked up into cloth.

Mutatis mutandis, Rules 7 and 8 apply to this relief.

13. To each distressed weaver five seers of thread (Calcutta weight) and no other quantity should be issued ; 5 to 10 weavers should club together and select one of their number as a sirdar, in whose name the entry of thread may be made. This man should be in a respectable position, should give in the cloth, and to him the remuneration should be paid for distribution, but the attendance of

all the weavers should be required at the golah, and the name of each man entered ; generally, the weavers of any one village should in this way work together.

14. For every seer of thread issued, 18 chuttacks of cloth must be returned. *Sarees, dhoties,* and *gumchas* should generally be made out of the cloth ; for every five seers of thread there should be at least one *saree*. Cloth should be returned within a fortnight of the issue of the thread.

15. If food is obtainable at about three times its ordinary price, cash should be given ; if not, food.

The rate of remuneration should be as follows :—

For every chuttack of cloth given back, $\frac{4}{9}$ anna or $\frac{3}{9}$ seer of clean rice (Calcutta weight).

If from a seer of thread less than 18 chuttacks of cloth are given back, a deduction for the deficiency must be made from the remuneration to be given at the value of the thread issued, *e. g.*, 16 chuttacks of cloth are returned from one seer of No. 1 thread, the remuneration would be $\frac{16}{9} \times 4$ annas $2\frac{14}{18}$ annas $= 5$ annas. Supposing that the weaving of a seer of thread is the work of two days, an ample remuneration would be found in three seers of rice per diem. It must be remembered that not only does the man work, but his wife and children assist in the weaving by setting up the loom, wetting the thread, &c. This would enable the weaver to maintain his family.

16. The darogah should endeavour to dispose of the thread and cloth by sale. The following rates are believed to be fair and reasonable :—

Rs. 42	for a maund	(Calcutta weight)	of No. 1	thread.
„ 38	do.	do.	No. 2	„
„ 34	do.	do.	No. 3	„
„ 30	do.	do.	No. 4	„

If any extra inducement to purchasers is necessary, a discount of Rs. 5 may be given on all purchases of thread or cloth to the value of Rs. 100. Cloth of No. 1 thread should be sold at Re. 1-4 per Calcutta seer, or Rs. 50 per maund.

No. 2	do.	Re.	$1\text{-}2\frac{2}{7}$	or Rs.	46 per maund.
No. 3	do.	„	$1\text{-}0\frac{1}{3}$	or „	42 „
No. 4	do.			„	38 „

17. The darogah should submit returns monthly in the form given, Nos. 1, 2, 3, 4, 5 and 6.

Mr. Kirkwood's Forms of Cotton Returns (Monthly).

No. 1.

Month ; (1) weight of cotton in hand up to end of last month ; (2) weight of cotton received during this month ; (3) total weight of cotton ; (4) weight of cotton issued during month ; (5) number of persons to whom issued ; (6) weight of thread given in during month ; (7) weight of cotton corresponding to weight of thread given in ;

(8) weight of cotton issued and not returned at the end of last month; (9) weight of cotton issued and not returned at the end of present month; (10) weight of cotton left in hand; remarks.

No. 2.

(1) Month; (2) balance in hand from last month; (3) quantity of thread received, sub-headings for the threads Nos. 1, 2, 3 and 4; (4) quantity of thread sold, Nos. 1, 2, 3 and 4; (5) quantity given to the weavers, Nos. 1, 2, 3 and 4; (6) quantity sent to other places or otherwise disposed of, Nos. 1, 2, 3 and 4; (7) total of columns 3, 4 and 5, Nos. 1, 2, 3 and 4; (8) balance in hand, Nos. 1, 2, 3 and 4.

N.B.—Also sub-headings throughout for the four descriptions of thread, Nos. 1, 2, 3 and 4.

No. 3.

(1) Month; (2) balance of cloth; (3) quantity of cloth received from thread, sub-headings Nos. 1, 2, 3 and 4; (4) quantity of cloth sold made from thread, Nos. 1, 2, 3 and 4; (5) quantity of cloth sent to other places, or otherwise disposed of, Nos. 1, 2, 3 and 4; (6) total of columns 3 and 4, Nos. 1, 2, 3 and 4; (7) balance in hand, Nos. 1, 2, 3 and 4.

N.B.—Also sub-headings throughout for the four descriptions of thread.

No. 4.

(1) Month; (2) balance of sale proceeds; (3) amount of sale proceeds of thread; (4) amount of sale proceeds of cloth; (5) total of columns 2 and 3; (6) amount remitted to treasury; (7) balance; remarks.

No. 5.

(1) Month; (2) balance of rice; (3) quantity of rice received (or other grain)—description of clean or dhanwa,* number of bags, aggregate weight; (4) quantity given to spinners—description of clean or dhanwa, number of bags, aggregate weight; (5) quantity given to weavers—description of clean or dhanwa, number of bags, aggregate weight; (6) otherwise expended—description of clean or dhanwa, number of bags, aggregate weight; (7) total of columns 2 and 4—description of clean or dhanwa, number of bags, aggregate weight; (8) balance in hand—description of clean or dhanwa, number bags, aggregate weight; (9) remarks.

No. 6.

(1) month; balance in hand; (3) amount of money received other than the sale proceeds of cloth and thread, &c.; (4) from whence received; (5) amount paid to spinners; (6) amount paid to weavers; (7) miscellaneous expenses; (8) total monthly expenditure; (9) balance in hand; (10) remarks.

[* *Dhanwa* rice means the partially husked rice from Burmah as opposed to the fully husked or *clean* rice from Bengal.—J. G.]

MISCELLANEOUS RELIEF MEASURES.

Orissa, 1867.—Mr. Hobhouse's Report.

There is no necessity to mention these means in detail. They were, as a rule, suggested by the exigencies of the case in particular parts of the country. For instance, there was no work to be had at one time in a particular locality, and it was advisable not to move the population, so the villagers were employed in gangs in their villages on local works of improvement. These were not remunerative to the Committee, but they made relief dependent on, and go hand and hand with, employment.

Village tanks, &c.

Again, houses in a particular locality required repair, and without such repair there was risk of sickness to their inmates; there was no money available to buy materials for repairs, or there was no thatch-grass to be had near, and the people had not the means to buy from a distance. The Committee advanced small sums of money to the ryots, or carried thatch-grass to the spot and distributed it, or helped the zemindars to carry and distribute it, and the ryots repaired their own houses. The Famine Inspector on tour looked to see that the repairs were needed, and that the money advanced, and thatch-grass given, were duly applied; and the special Deputy Collectors reported that this mode of relief was fairly, as indeed was to be expected from the nature of the case, availed of, and was not abused.

House repairs.

Again, there were difficulties in certain localities in providing work on the spot for paupers; there were no homes to which the paupers could be sent, and it was not advisable to maintain them in idleness. Accordingly advances were in one place made to certain zemindars to assist them to settle paupers on their estates; and in another place a Government khas mehal in Khoordah, a pauper settlement was, with the aid of the Commissioner, set up; and in other places (the Chilka Lake and the Salt districts), encouragement was given to emigrate. It may be said, however, as a rule, that these methods of giving relief did not take or were not successful.

Pauper settlements (agricultural).

Again, in certain villages there was a want of seed grain, and in 36 of these relief was given in this shape at an expense of Rs. 3,000; but here again the Committee could not be sure that the relief accorded had been actually given or had been without filtration. And lastly, there were localities where there were ferries to cross, or where ferries were wanted, to enable people to reach the relief depôts, and it was found that the people could not pay the ferry tolls, much less establish new ferries, so the public ferries were for a time set free of toll, and other ferries were established at the Committee's expense as a mode of relief.

Seed grain advances. Ferry tolls abolished.

All these modes of relief were in themselves trifling, but they are mentioned because they shew, the Committee think, that the eyes of the local authorities were everywhere, and that no sooner was an evil felt than an attempt was made to remedy it.

CENTRALISED RELIEF, OR RELIEF AT CENTRAL POOR-HOUSES.

Centralised relief combined with in-door labour, administered by Mr. John Strachey, Moradabad, 1860-61.*

9. *Principles of administration of public charity.*—The general principles upon which public charity ought to be afforded, are equally applicable to the able-bodied and to the infirm. In both cases, it is a great evil that recourse should be had to charity, until no other alternative remains. It is a serious mistake to suppose, as people have often done during the present scarcity, that every person, apparently unable to work, is a fit object for charity.

The evils of indiscriminate private charity are universally admitted. It has been too commonly forgotten that indiscriminate public charity is far worse. The latter has all the evils of the former, in an aggravated shape, and it is doubly injurious, because it is a public recognition of a false and mischievous principle. Under the pressure of extreme famine, it is true that the difficulty of discrimination may become too great to be contended with, and it is possible that in some districts this may have occurred already. But such cases must be extremely rare, and until distress becomes altogether unmanageable, there can be no reason for the disregard of the obvious principles upon which public charity ought to be administered.

The problem, as Mr. J. S. Mill has said, is, "how to give the greatest amount of needful help, with the smallest encouragement to undue reliance upon it." This is equally true, whether relief be given to the infirm in the shape of simple charity, or to the able-bodied in return for labour performed.

10. The principal originally laid down by the Government, that the able-bodied poor should receive relief only in return for labour, was evidently the first essential of a reasonable system. But it is often difficult in practice to draw the line between those who are, and those who are not, able-bodied. Public Works undertaken by the Government, cannot, whatever be the scale of operations, give relief to all that require it. This is especially the case when, as at the present time, the chief sufferers belong to the non-agricultural classes. Many are incapable of working on roads or canals, who would be able to perform a fair amount of labour if employed in the ordinary occupations to which they have been accustomed. Many are physically unfit for out-door occupations, who are well able to perform work of a sedentary kind. This is the case with great number of women, and especially with those who have young children from whom they cannot be separated.

It is useless to attempt to make people perform work for which they are altogether unfit. Not only is the result failure with respect

* From Selections of Records N.-W. P., 1862. Part XXXVI.

to them, but they render it impossible to obtain a fair amount of work from the others associated with them, who are really able, and who might be willing to work. If, for example, there be a hundred applicants for relief, all of whom are capable of performing some kind of work, and out of this number only fifty are really fit for employment in road making, only those fifty should be so employed. The remaining fifty must be employed in some other way. Even if the employment be unprofitable, the loss will not be so great as it is under the other system.

11. *Necessity of properly organized poor-houses and work-houses.*—It appeared, therefore, to the Committee, [Moradabad] that to enable them to carry out, in a satisfactory manner, the principles which the Government had laid down, they must provide the means of meeting such cases as these of which I have been speaking. Thus, although the provision of work to the able-bodied poor, did not directly fall within the province of the Committee, the provision of work, under certain circumstances, became a duty which the Committee felt they must accept.

This duty being accepted, and the necessity being admitted of providing all possible checks against the relief of the undeserving, it appeared to the Committee to be evident, that there was only one effectual means by which the objects that were aimed at could be attained. This was the establishment of a poor-house, which should at the same time be, strictly speaking, a work-house, and this the Committee proceeded, with the sanction of the Government, to undertake.

12. *One poor-house for the district [Moradabad]* considered sufficient.*—The distribution of food at public kitchens to all comers, in the manner that has often been practised, appeared to be open to much objection. No enquiry or discrimination is possible under such circumstances. The separation of the deserving from the undeserving, at the time of the distribution of food, must always be impracticable. The result of such a system is, that the persons who are really fit objects of charity, obtain a much smaller measure of relief than the professional beggars, fakeers, brahmins, and impostors.

Although the Commitee admit that, under the pressure of great distress, it may become absolutely necessary to establish poor-houses in the interior of districts, they considered that no such necessity existed in Moradabad, and that it was possible to make arrangements under which one poor-house for the district would be sufficient.

At the Sudder Station, real supervision was alone possible, and the Committee started with the assumption that such supervision was essential. This determination, not to establish kitchens in the interior of the district, has been proved by the result to have been a wise one, and that sufficient relief has been afforded, is in some degee shewn by the fact, that although the pressure of the scarcity has not been so heavy in this as in many other districts, more people have been relieved under the system which has been followed here, than in almost any district of these Provinces.

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* [In 1871 the area of Moradabad is set down at 2,461 square miles, the population at 1,095,306 souls.—J. G.]

13. *Arrangements in interior of district.*—At each Tehseelee, and at other places where the distress was great, Sub-Committees were appointed. These usually consisted of the Tehsildar, Moonsiff, Thannahdar and respectable native gentlemen of the place. These Sub-Committees were expected to send to the poor-house at Moradabad, all persons who appeared to have no other means of support. It was their duty to supply the means to all such persons of reaching Moradabad, and for giving them food until they were received into the poor-house. All persons unable to walk, were sent by in cart or other conveyance. The following table gives the number of persons belonging to each pergunnah of the district, who received relief at the poor-house on 30th April and 31st May.—

Pergunnah.	Men.		Women.		Children.		Total.	
	April 30th.	May 31st.	April 30th.	May 31st.	April 30th.	May 31st.	April 30th.	May 31st.
City Moradabad	270	212	375	379	435	486	1,080	1,077
Pergunnah ditto.	137	222	180	241	145	245	462	708
Do. Billaree	103	191	98	129	99	192	300	512
Do. Sumbhul	153	351	154	309	141	319	448	979
Do. Hussunpore	90	256	99	279	109	231	284	796
Do. Amroha	225	377	210	466	211	442	646	1,285
Do. Thakoordwara and Khaseepore	37	39	30	41	27	61	94	141
Other districts	155	197	149	127	96	128	400	452
Total ...	1,176	1,845	1,275	1,071	1,263	2,104	3,714	5,920

This table shows that relief has been afforded to all parts of the district, and it gives a fair comparative representation of the amount of distress in the several pergunnahs. Thus the people of Amroha and Sumbhul have suffered most, and those of Thakoodwara and Khaseepoor the least. The people belonging to other districts come chiefly from Bijnore.

14. *No unwillingness of poor to come to the poor-house.*—No measure that can be adopted can given in such seasons of distress complete relief all who require it, and this must be admitted whatever system we follow. Some, doubtless, who are apparently in want, refuse to be sent to the poor-house at the Sudder Station; but these refusals come, in all the rarest cases, from those who are not really starving, and who by some means or other manage, although perhaps with difficulty, to attain the means of supporting themselves. That such persons should refuse to be dependent on the public charity offered to them, is an advantage, not an evil. Supposing that there be nothing in the arrangements made for the relief of the poor to which they can reasonably take exception; if, in particular, the measures be complete for the prevention not only of all interference with the prejudices of

caste, but of the possibility of all rumour of such interference, the poor who have really no other means of support, will seldom show any unwillingness to avail themselves of the relief offered to them. It is said that, in some districts, the people of particular tribes have preferred to die at their own homes, rather then accept the relief that has been held out to them. Nothing of this kind has been seen in Moradabad. The Goojurs, of whom in particular this is reported to have been the case, have suffered little in this district.

I have stated sufficiently the principles upon which the Committee considered that they ought to be guided. I proceed to describe the manner in which the poor-house and work-house has been actually organized. The system adopted received the general approval of the Government in March last, but it was only possible to carry it into effect gradually.

15. *Situation and general admission into poor-house.*—The poor-house is situated in a mango grove of great extent, about half a mile from the city of Moradabad, on the Allygurh road. The accompanying plan,* will show the general arrangements that have been adopted. Good sheds are provided for the paupers' dwellings, workshops, hospital, cooking places, store-houses, and for all other necessary purposes. The internal organization will be understood from the details which are given further on.

16. *Checks upon admission into poor-house.*—It was necessary at the outset of operations, to provide against the admission of persons who were not fit objects of charity. The first essential point was, the observance of the rule laid down by the Government, that relief should ordinarily be given in the shape of cooked food. This rule provides the most valuable check that can be obtained, and it may be safely affirmed that without it, no proper system is possible. In the next place it was insisted upon, that no persons should receive food who had not first been examined and passed by the Committee. The only exception is made in favor of those who are evidently in actual want of food at the time of examination. They are necessarily relieved upon the spot. As a general rule, all applicants for relief must appear before the Committee the day before they are admitted into the poor-house. Three members of the Native Sub-Committee meet daily for the purpose of receiving and judging of the propriety of all applications.

[* To reproduce the plan would delay this publication. Its chief features are as follow:—
The place, a retired spot, mostly waste land and mango tope, was about 2,000 feet long by 1,500 feet broad. The workhouse consisted of 13 sheds besides two rope walks forming the sides of a quadrangle 700 feet long by 700 feet broad. These sheds were allotted to the several occupations, namely two sheds to spinning, three to string-making, one to storage of paper and string, one to newar rope and cloth making, one to durree matmaking, one to storage of grain, with separate compartments for cleaning and grinding the corn. A corner by itself was marked off for chumars. Musulman accommodation took up nearly one side of the quadrangle, and inside the quadrangle the Musulman inmates were provided with a cooking place near a pucka well. The dwelling place and cooking place (with a pucka well close by) for the Hindu inmates was apart by itself outside, but near the quadrangle of work-sheds. Beyond these and still further from the quadrangle stood the hospital sheds and the dispensary (roomy and well apart). In another spot, well aloof from all, stood the accommodation for lepers. Separate sets of privies for the several classes above mentioned were provided at all the outskirts except that of the principal approach. At the principal approach there was accommodation for the native members of the Committee, some of whom attended during the day.—J. G.]

After such enquiry as is possible, the names of those persons who appear deserving of being admitted into the poor-house are entered in a register drawn up in the following form—

General Register of persons admitted into the poor-house.

1	2	3			4	5	6		7	8
Date.	No.	Name.			Father's Name.	Caste.	Residence.		Age.	Rate at which food is given.
		Man.	Woman.	Child.			Zillah.	Pergunnah.		

A wooden ticket is given to every person admitted, bearing a number corresponding with that in column 2 of the register, and signed by a member of the committee. No one can receive food at the poor-house until he presents this ticket.

The next step is to separate those who are fit for light work, from those who are utterly helpless. Every one is expected to work who is not physically incapable.

So long as the allowance of food is kept at a reasonable rate, that is, at an amount not more than sufficient to preserve health, and while the rule is insisted upon that every one shall work who is able to do so, there is little inducement held out to persons to enter the poor-house who have other means of support. The application for relief, afforded upon such conditions, is the best evidence of want.

On the 31st May, out of 5,920 persons in the Moradabad Poor-house, 2,372 were employed in various occupations.

It is not insisted upon that every one who receives relief shall live permanently in the poor-house. The other checks upon admission that have been established have been found sufficient, and on sanitary grounds it would have been unwise to lay this down as a necessary condition. The greater number, however, of the paupers are permanent inmates. It is only those who belong to the town of Moradabad who return in any numbers to their own homes. Since the working paupers are obliged to be present at the poor-house during the whole of the day, and since every one is employed who is capable of working, abuses can hardly result from this indulgence.

17. *Poor-house arrangements.*—Good huts are provided for all the inmates of the poor-house. Every person has assigned to him his proper dwelling place. Near each series of huts, a space of ground is marked off with bamboos, and within it the food is distributed. For each workshop there in also a separate enclosure, with the necessary sheds, within which the work is carried on. At the entrance to every enclosure is placed a board, showing the purpose to which it is devoted. A separate range of huts is provided for lepers.

18. *Preparation of food. Scale of diet.*—The management of all arrangements connected with the preparation of food is left to the native members of the committee. Cooked food is alone distributed and at the following rates:—

		Flour.		Dhâl.
To adults of both sexes	.. 8	chittacks.	1½	chittack.
„ Children above 10 years	.. 6	„	1½	„
„ Do. below ditto	.. 4	„	1	„
„ Do. in arms	.. 2	„	1	„

The above are ordinary rates for all non-workers, but to working paupers, who may be considered to require a larger allowance of food, 10 chittacks of flour, and 2 chittacks of dhâl, are allowed.

The cooking arrangements are of two kinds. For Mahomedans, and for all persons who make no objections, on the ground of caste—and these form the larger proportion of the whole—the cooking is done by contract. This is found to be the least troublesome and most economical plan. Large ovens are built at convenient spots, and the flour is baked into chupatties, each containing two chittacks. The whole of the food is examined and weighed before it is distributed, and it is assumed that every seer of flour ought to produce one and a half seer weight of cooked food [*sic* in original]. Every possible precaution is taken, and with proper supervision very little fraud is possible. The contract charge for cooking one maund of flour, together with whatever quantity of dhâl is required to be distributed with it, is 4½ annas. This includes all charges, except that for water, which is supplied by bheesties, who are paid servants.

For preparing the food of those classes of Hindoos, whose prejudices of caste have to be considered, Brahmin cooks and kuhars are entertained.

19. *Distribution of food.*—No arrangements are more essential than those for ensuring the regular and orderly distribution of food after it has been cooked. The non-working paupers are divided into parties of five hundred. To each of these parties a separate enclosure is allotted and the arrangements for each are under the supervision of a paid servant. The working paupers are similarly divided into parties of two hundred. For each party a register is maintained. This is a copy of the general register mentioned above, with the addition of columns, showing for every day in the month whether each person was present or not at the distribution of food.

The food is distributed between 10 and 12 A.M. The paupers sit down, according to the order of their numbers, in the places assigned to them, each person showing his ticket. They soon learn to take their places without confusion. The man in charge of the register, then goes down the line, comparing each person with the entries in the register, and after this examination, the food is distributed.

Small carts, drawn by hand, are provided. In these are carried off, at one time, from the cooking place, all the food required for the paupers belonging to each enclosure. In this manner the food for each party is kept separate; the exact quantity required is delivered at each enclosure; confusion is avoided, and a useful additional check is obtained. It is almost impossible, with this system, that any one should receive

more than his proper share. At the commencement of operations, fraudulent attempts were sometimes made to obtain food, but they were always discovered, and it is believed that they can hardly ever be successful.

The registers show the number of persons present every day, and the quantity of food distributed in each enclosure. These registers are made up daily, and the totals of the whole, show the results for the poor-house generally.

Food is given only once in the twenty-four hours. The general good health of the paupers has shown that there is no necessity for more frequent meals. Hitherto, there has been no variation in the diet, except that different kinds of dhâl have, from time to time, been supplied. Persons for whom other food is necessary can obtain it from the hospital. Nearly the whole of the wheat consumed in the poor-house is ground by the working paupers.

20. *Employment of working paupers.*—On the 31st May, 2,732 persons were employed in the poor-house in various simple occupations. The working paupers, as already mentioned, are divided into parties, each containing two hundred persons, and each having its separate enclosure and sheds. One or more paid servants superintend the operation of each party, and instruct the paupers in their work. Much of the work of superintendence is, however, done by inmates of the poor-house itself. All working paupers are expected to be present in the places assigned to them at 6 o'clock every morning. They work till 11 A.M. They then rest for about two hours, and during this time they receive their food. They then again work till 4 P.M., when the employment for the day is ended. In the morning, each person has a certain task allotted to him. Thus, in the rope manufactory, a certain quantity of babur is given to each person, sufficient for the day's work. Each woman employed in spinning receives, in the same way, a basket containing cotton-wool, which she is expected to return in the evening spun into thread.

21. *Nature of work performed.*—The following statement shows the nature of the work carried on in the poor-house on the 31st May, and the numbers employed in each occupation :—

Nature of Work.	Men.	Women.	Children.	Total.
Cotton spinning	.....	414	.....	414
Cloth and nawar manufacture	28	16	5	49
Durree ditto	9	15	.....	24
Rope-making	445	302	213	960
Grinding corn	1	303	.....	304
Road-making	237	33	47	317
Building sheds and occupations connected with poor-house	276	28	.....	304
Total ...	996	1,111	265	2,372

22. *Results of work-house operations.*—These operations were undertaken without any idea of profit, and even if they had been carried on at a loss, they would not the less have been expedient. But in a merely economical point of view, the results have been very satisfactory. It is not possible for me, at present, to give detailed accounts of expenditure and receipts, but the following statement is believed to be approximately correct. It will serve to give an idea of the results of the operations

carried on during the month of May. It must be understood that this statement shows only the expenditure incurred in the workshops. The whole of the charges for feeding the paupers employed, and for the ordinary expenses of the poor-house are separate. It would equally have been necessary to maintain these paupers, had no work been performed; consequently, the last column of the following statement represents a real, and not an imaginary profit. As, however, a considerably part of the articles prepared were not actually sold during the month, but were in store on the 31st May, the entries in columns 5 and 6 are subject to future correction. There is no reason for supposing that the receipts will be less than the amount given in the statement, but should they fall below the estimate, it will not the less have been shown, that even on purely economical grounds, the employment of the pauper is desirable. We may consider that, during the month of May, the expenses of the poor-houses were less by Rs. 712-1-3, than they would have been if no work had been carried on.

Statement showing the Expenditure and Estimated Receipts on account of the Moradabad Work-house for May 1861.

1	2	3	4	5	6
Nature of employment.	Articles prepared or work performed.	Quantity of articles prepared.	Expended on account of Work-house for raw materials, &c.	Estimated value of articles prepared.	Estimated profit.
		Mds. S. C.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Rope-making	Rope	475 9 12	494 15 2	768 2 3	273 3 1
Cotton-spinning	Cotton thread ...	28 38 5½	396 1 0	481 2 6	85 1 6
Durree-making	Durrees	43 in No.	32 14 3	48 8 0	15 9 9
Nawar-making	Newar	0 24 7	10 1 10	10 9 0	0 7 2
Cloth-making	Coarse cotton cloth.	75 pieces.	43 3 3	47 3 3	4 0 0
Grinding corn	Flour	.....	8 12 5	148 4 2	139 7 9
Road-making, &c.	Repairs to roads and earth-work.	.....	4 12 0	199 0 0	194 4 0
Total	.....	.....	990 11 11	1,702 13 2	712 1 3

30. *General results of relief operations in district.*—During the four months ending on the 31st May, the total number of persons relived was 3,30,203. The total expenditure incurred during same period was Rs. 19,185-13-9; the receipts from total subscriptions and donations amounted to Rs. 10,704-14-0; a corresponding sum was contributed by Government; Rs. 1,141-11-6 was received from the sale of articles manufactured in the work-house, and the sum of Rs. 5,000 was granted by the Central Committee at Agra. The detailed accounts have already been submitted to Government.

N. W. Provinces, 1860-61.—Colonel Baird Smith.

21. The methods of relief adopted within the famine tract for the mitigation of the sufferings of the people form the next part of the subject to which attention may be given.

In all countries, and in their best conditions, there is ever a large mass of permanent pauperism which the community is bound to sustain either by moral or by legal obligations. The helpless from disease,

age, infirmity, or other causes, make up for the most part this painful aggregate, and on the occurrence of any such calamity as the present, these paupers give the earliest signs of its existence. Living precariously at all times, the general pressure contracts even their very uncertain means of support, and they are the first claimants for relief. Their numbers are soon swelled, however, as the pressure grows more intense, by those whose strength has failed them; women, possibly deserted by their husbands, and left with infant children; children similarly deserted by their parents, or left orphans, and many others who from different causes are reduced to helplessness. These, then, the helpless poor, form the first great section of the sufferers to whom attention is imperative. In speaking of them as helpless, it is not meant that they are absolutely incompetent to any personal efforts, but only that they are not fit for out-door labour.

The other great class is the able-bodied poor, meaning thereby all those men, women and children who are competent to out-door labour and can be employed on works. The able-bodied, however, are no more capable of full work than the helpless are incapable of any, the gradations of strength in both being of course many. The systems of relief for those two great classes having distinctive features may be described separately.

22. The helpless poor were rightly made the special charge of the European and native community, and the organisations for their relief were formed exclusively on the basis of voluntary and non-official efforts. The local Government laid down certain broad general rules for guidance, and supported its right of interference by contributing donations equal to the amount of private subscriptions. But considerable freedom had been left to local action, and as the natural result, general rules had been variously interpreted.

It may be proper to state here that I shall describe the system of relief for the helpless poor, not as it may appear in printed papers, but from general observation of it, as I saw it in actual work in about 20 separate localities scattered throughout the three sections of the famine tract.

Relief with cooked food strongly recommended. Distribution of uncooked food deprecated by Colonel Baird Smith.

Relief from hunger by the supply of cooked food is the main characteristic of the system, and I saw but one or two instances of its being departed from in the course of my inspection. At Futtehghur, rations of uncooked food were being issued, and at Delhi I found money was distributed at one of the places of relief, paupers coming twice weekly and receiving a sum, graduated according to the number of the family, for their support during the intermediate time. Unhappily the latter plan is so provocative of abuses, notwithstanding the most anxious care to prevent them, that I do not think it ought ever to be resorted to. In fact, it is as a corrective of or a preventive to abuses, that the supply of cooked food works so well, and excepting in very special cases, and under very peculiar circumstances, I am satisfied it should be rigidly adhered to; I found an absolute unanimity on this point among native committees, and as all personal details

connected with the food are left exclusively to them, the plan has not in my experience been the subject of a single complaint.

Committee Members presiding in turn.

A district committee supervises the details of distribution, members taking it in turn to be present when food* is given out. The task is laborious, and not wholly free from danger, as infectious diseases, such as small-pox, are very common. The time occupied is never less than about two hours, and is sometimes twice as much in large stations. Nothing could surpass the hearty zeal and earnestness with which these supervising duties were generally performed and carried on as they have been through the whole of the hot season, the strain has been most cheerfully accepted by the European community, while some of the very best local plans for relief I have seen, have owed their efficiency, I am happy to be able to record, to the intelligence, personal interest, and unwearied industry of the native members of committees. This was specially the case at Moradabad, where the best organised relief house I saw during my inspection exists, and I do but echo the judgment of the Magistrate, Mr. J. Strachey, in saying, that the practical working out of the whole scheme, of which he supplied the leading principles, was due exclusively to the native committee, and pre-eminently among them to the chief native Judge, Syud Ahmud Khan, a gentleman whose devotion to this work has been admirable, and whose knowledge of the political economy of famines was singularly exact and sound.

There was, of course, an infinite variety in matters of detail in the systems practiced in different districts. At the time I saw most of the relief houses they were only taking form, and mistakes were occasionally noted. These were pointed out wherever the opportunity was given in kindly consultation with the committees or their executive members, and the recommendations generally made by me, can be judged of by reference to Appendix No. 2,† in which they will be found thrown into specific form.

Colonel Baird Smith's Rules.

It need only be said here, that the characteristics of a safe and effective system of relief for the helpless poor, seem to me to be mainly these :—

1*st*.—Relief by cooked food only ; the nature of the food, however, being cautiously adapted to the physical strength of the paupers.

2*nd*.—Either a careful system of selection by the the personal enquiries of competent sub-committees or permanent residence within the relief house, should be conditions of continuous relief. No conditions need be attached to casual relief, excepting evidence of suffering from hunger, about which there is rarely any risk of error.

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* Rations vary, but the following are averages :—

For men and women with infants, 16 oz. bread, 4 oz. vegetables.
For women and lads, 12 oz. bread, 4 oz. vegetables.
For children above ten, 12 oz. bread, 2 oz. vegetables.
For children below ten, 8 oz. bread, 2 oz. vegetables.

† These rules were re-adopted in 1868-69 with a slight modification. They are reprinted in another passage of this volume. See page 165.—J.G.

3rd.—The principle, that all who can work, shall work in ways suited to their capacity, should be carried out as much as possible with permanent paupers. A relief house gradually developed into a true work-house, where the totally helpless are cared for and supported, while the partially helpless are occupied in such light work as they are accustomed to, or are fit for, is the most satisfactory form the relief of this class of paupers can assume. I have seen it in action only at two places, Moradabad and Roorkee, but I have reason to believe that the principle is now adopted in other stations also, and should the necessity for continuous relief be protracted, the plan will probably become general.

4th.—Relief should be interpreted liberally, and be made to include relief from nakedness as well as hunger, and from disease by medical treatment and hospital comforts.

5th.—Cautious extension of out-door relief in the cases of female paupers of respectable position, by whom appearance in public would be felt as an intolerable degradation. When practicable, appropriate labour may be required in exchange for food.

6th.—The extension of relief houses throughout the interiors of districts, especially in the sections of greatest intensity wherever European or reliable Native supervision can be secured. Without such supervision, the action of detached places of relief is liable to much abuse, and involves great waste of means. Respectable native supervision, with only occasional European control, may however be trusted, and the relaxation of the first orders of Government, making the continuous presence of Europeans indispensable, has no doubt been beneficial.

Relief with Cooked Food at Relief Centres, or Poor-Houses.

ORISSA, 1866 (FAMINE ENQUIRY COMMISSION, PART I, PARAS. 311-314.)

In the management of the feeding centres it may be said that there were three main difficulties—First, the test of admission. So sudden were the arrangements, so overwhelming the crisis, and so small the official staff, that it is to be feared that, with a consideration for sex and age, the only general test applied was that of extreme emaciation; and of those sufficiently emaciated to obtain admittance, too many never recovered. For those not so bad, the attempt was generally made to provide some kind of labor, real or nominal, and food was given in return for labor. But when rice was short at the more distant centres, those who seemed tolerably able-bodied were turned out of these gangs and told to go elsewhere. The works of the Irrigation Company were nearly stopped during the rains, and the returns of expenditure show that the numbers employed by the Public Works Department at that season were small. It was almost impossible to carry on works then. Second, it was seldom possible to establish the centres within such a moderate distance of one another, that the recipients of food could come daily for it from their houses, the more so as it was the season of the rains. The centres became, therefore, the temporary homes of crowds of houseless mendicants, and the recipients of relief lived in a manner which must have been demoralising and debasing in the extreme. Third, there was much caste prejudice,

and many were deterred by that most insuperable of native feelings from seeking food till it was too late; some died without seeking it at all.

There can be no doubt that all these causes exercised a very deterrent effect, and that of those who eventually sought and obtained relief, a very large proportion unhappily died. Every sort of bowel complaint carried off great numbers. Dr. Jackson, who was at the time Civil Surgeon of Balasore, and who honorably distinguished himself by his humane exertions, describes, in his examination (pages lxxxv-vi), the effect of extreme emaciation, even where food is obtained before death actually results from direct starvation. We are told on all hands of many who, ravenous with hunger, ate food uncooked and very rapidly succumbed. Of those who survived for a time, the intestines of very many have been found to swarm with parasitical creatures to a degree which prevented their recovery—no doubt a result of unwholesome food.

It seems to us that a too complete prominence is given to the third of the causes which we have mentioned as deterring people from coming for food, *viz.*, caste prejudice to the exclusion of the other two, and still more to the exclusion of the fact that the relief came too late. To say nothing of that which our former observations will have shown, that if much larger numbers had come to the centres, either they could not have been fed at all or could only have been fed by stopping the sales and starving the better classes, it is abundantly clear that the harm had, for the most part, been done before feeding places were within reach of the mass of the population. And that, in truth, it was not caste or prejudice that was the main cause of mortality, is, we think, very evident from the fact that it is stated on all hands that by far the greatest loss of life has fallen on those lower castes who had least caste prejudice, whose manner of life least unfitted them to avail themselves of public relief, and who were most accustomed to labor.

The system followed at almost all the centres was that of giving food ready-cooked to the crowds assembled at meal-time. The quantities allowed were various, as were the details of the diet. Every effort was made to introduce good and uniform system, but the exigencies were such that it was impossible in practice to do so completely. There was, therefore, no doubt some variety. The scarcity of rice was so great, the demand so enormous, and the fear of abuse so constant, that the general tendency necessarily was to make the allowance somewhat scant, but on the whole great good was done by much praiseworthy exertion.

Centralised relief *versus* Village relief.

(Orissa Famine Commissioners. Part III, paras. 85, 86.)

85. As respects again gratuitous relief, the first great question is between the two modes which would be called in England in-door and out-door relief, although in this country the terms might be reversed. If abuses could be prevented, there is no doubt that in times of the greatest distress when the labor test is little more than nominal, and at all times as respects the helpless poor, there would be the greatest possible advantage in giving relief to the people, either in money or food, at

intervals of a few days, and allowing them to take it to their own homes. Probably they would make the same quantity go farther; certainly it would do them infinitely more good, and all the evils of the feeding centres would be avoided. But again, in case of a partial famine, such a system would probably present too many temptations, and unless there were the means of obtaining a real personal knowledge of all applicants, great abuses might result; while in more universal famines, the means of managing such a system on the largest scale could scarcely be found in most districts. It can only be said, still, that all must depend on the circumstances of the particular famine and the particular locality. Sometimes relief may best be given to the people at their own homes, sometimes, and perhaps more frequently, the feeding centres are a necessary evil. If these centres can be established at so many places that the people can daily resort to them without sleeping away from their homes most of the evil is avoided.

When that is the system, the distribution of cooked food is the method which is followed at Native charities, and seems on the whole the best and the least liable to abuse. Care should be taken to provide cooks who will not interfere with caste perjudices. The provision of some sort of labour for those capable of working must always be the best check on unnecessary applications for food. But effort should be made to provide labour suited to them for those who are really unfit for rude out-door work.

Scale of Diet.

86. The scale of diet has been a subject of much discussion. And on this subject there is more room for general rule. Even here, however, a good deal must depend upon circumstances. When the degree of famine is doubtful and it is an object to guard against too free a resort to the feeding places, it may be proper to give only so much as may support life when eked out by any thing that the people can pick up; but when unhappy creatures are reduced by long suffering, a liberal diet is necessary to restore them, provided it is not given in large quantities too suddenly, for then, as we have seen, it does harm. We must also consider this question to be one requiring more medical knowledge than we possess, for the difference in the scale of different dietaries a good deal puzzles us. Throughout the famine [Orissa, 1866] opinions seem to have varied between 4 and 8 chittacks, that is between ½lb. and 1lb. of rice for an adult, and the Board of Revenue appear to have favored the scale of ¾lb. But we find that the Bengal Jail Dietary prescribes 14 chittacks of solid food for a non-labouring Native prisoner, and 16 chittacks for a laboring prisoner, that is 1¾lbs and 2lbs. We should imagine the jail scale to be excessively liberal, the more so since we find the scale prescribed for a European prisoner in Bengal to be—

Meat	..	..	..	1 lb.
Bread	..	..	..	1½ „
Vegetables	..	..	..	1 „
		Total	..	3½lbs. solid food.

besides butter, sugar, tea, milk, and condiments; whereas the regulations for Relief Committees under Act X, Vic. Cap. 7, appear to prescribe for a starving Irishman only 1½ lb. of bread, or 1 lb. of biscuit.

We believe that rice is quite nutritious, saving that one chemical element is wanting in it. In Orissa the nitrogenous element was, we understand, a good deal supplied by snails and such creatures; but every effort should always be made to add to rice either the nitrogenous grain called *dhál* or fish, or ghee, *i.e.*, clarified butter. The food being thus composed, we should say that 1 lb. or 8 chittacks would always be sufficient for people receiving gratuitous relief without hard labour, but an additional allowance might be made when substantial labour is exacted.

In those far reduced by starvation, quality of food is more important than quantity, and care more so than either. Good hospital accommodation is therefore a very essential part of all famine arragements.

Orissa, 1867.—From report by Mr. Hobhouse, President of Calcutta Relief Committee, pp. X—XII.

Relief Centres.—The mode in which these centres sprung up was on this wise. The first class of persons to feel the effects of the famine of 1866 was that class which was made up of the old, the infirm, the incurably diseased, the insane, the widows, the lame, the blind, and the like,—a class existing in considerable numbers in every village community, and supported gratuitously by individuals or collectively by such community. When things came to such a pass, that all in the village or family could not be fed, the class of persons in question was the first to suffer, and, accordingly, the first signs of the severity of the famine was the appearance of this class of persons begging food everywhere. So formed, these persons, who may be aptly called the *Pauper class*, were collected together in one, or more central localities, and were there, by the Government authorities fed gratuitously with rice.

This was the origin of the system of relief centres; and as the famine increased in severity, the persons congregated, or receiving relief at these centres, were not composed only of the pauper class, but of all persons of the community who had strength to drag themselves to the centres, and over whom the pangs of hunger exercised a stronger influence than the fear of loss of caste. But, perhaps, it may be said that the persons actually residing at the centres were mostly persons of the pauper class, and that individuals of other classes only resorted to the centres from time to time as necessity compelled them.

The pauper class described is at all times, and in whatever numbers congregated, a class of persons the most debased of native communities, and seeing that such persons were congregated at, and receiving relief from, the centres, it was long before any persons, from the more respcetable classes of the community resorted to these centres. By such presons, and by the community generally, such resort was invariably regarded as a loss of caste; but when the pangs of hunger conquered the fear of shame, and when resort was once made to the centres, the resorters, to whatever class of the community they might have belonged, became all equally demoralized.

The women became prostitutes; the able-bodied men would not work; the clothing delivered out was stolen or sold. In one centre (at a later period of operations) some 9,000 or 10,000 persons, at another some 3,000 persons, were found receiving food in idleness, and yet capable of more or less labor. At another centre no less than upwards of 500 Brahmins were discovered in the receipt of full rations, yet doing nothing. At another centre persons drafted, as capable of work, into the light labor gangs, were found reducing themselves again to that state of physical weakness at which it became necessary again to receive them into the centres. On another occasion, when the light labor system was introduced in Cuttack, persons were found leaving the centres there, and demanding admittance at the centres in Pooree, where the light labor system had not then been introduced. On another occasion, persons drafted from the centres into the light labor gangs steadily refused to work, and collected in a body at the centre, whence they had been discharged, demanding their usual rations, and threatening to force their way in, and take them.

These facts will make sufficiently evident some of the abuses to which the system of relief at certain fixed central places was open, and it became one of the first objects of the Committee to abolish this system.

But this could not be done at once, or in any wise other than by degrees and with great caution.

The centres had sprung up under the force of circumstances; persons who actually required relief were congregated at the centres or resorted to them. The people generally knew that these centres were the places at which they could obtain relief if they so desired it. Even the able-bodied at the centres could not at once be discharged, because there was not, at once to be had, labor sufficient or suitable. The residents at the centres were mostly women with children, whose husbands, having emigrated to escape the famine, had no desire to return only to find their wives disgraced, and who had, therefore, no homes. Most of the residents were ill clad and much emaciated, and many were suffering from cutaneous diseases, and many again were helpless and infirm, and not fit to move or to be moved.

For these and like reasons it was found impossible to break up the centres at once and abruptly, but measures were immediately adopted for breaking them up by degrees; and by these measures, aided by the gradual restoration of the Province to its normal state, the centres were from time to time abandoned, either absolutely or by amalgamation, until, at last, by the end of November 1867, not one was in existence anywhere.*

In the meantime every effort was made to ameliorate the condition of the centres, to systematize and improve the relief administered at them, and to reduce the numbers resident at, or resorting to, them.

Cook-rooms, sleeping-rooms (separate for men and women), hospitals, separate wards for contagious diseases, rooms for storing cotton and other materials, yards for the distribution of rice, and other

[* The maximum number of centres that had been open in Orissa, 1867, had been 66; see page 148.—J. G.]

buildings necessary for the purposes in view, were either erected or put in good repair.

In-door and out-door occupations were provided for such of the inmates of the centres as were capable of work, and yet could not be provided with suitable work elsewhere; such as husking rice, twisting coir-rope, spinning cotton, trimming and turfing roads and laying on metal on the same.

And the cotton spinning, the weaving, the light labor, and village relief systems were introduced in order at once to thin the number of residents at the centres, to prevent the influx of more residents to decrease the number of those resorting to the centres, and gradually to supersede the system of relief at centres by a system of relief at the people's homes, and so insensibly to lead the people back to their homes and their ordinary avocations.

The Committee may be said to have taken the relief centres into their charge from the 1st of March 1867, and they were finally broken up by the end of November following. The Table in Appendix I, page 22, will show the numbers resident at, or resorting to those centres within the above interval; and Table III, page 24, will show the expenses thereof.

The expenditure was as follows:—

District.	No. of persons relieved.	Cost.	Average cost per person per month.
		Rs. A. P.	Rs. A. P.
Cuttack	101,125	2,50,855 9 7½	2 7 8
Pooree	40,209	91,173 14 7½	2 4 3
Balasore	15,168	41,792 12 8½	1 12 1
Total ...	156,502	3,83,827 5 0	2 7 9

These figures speak for themselves; and taking into account the ordinary rate of wages in the Province, and the facts that most of the people at the centres had to be supported wholly and often with extra food, and without giving any return for the support given, and that the value of rice expended was calculated at rates far above those at which rice was procurable, we hope it may be considered that the rate of expenditure per person at the centres has not, on the whole, been extravagant.

CUTTACK, 1867.—MR. KIRKWOOD, RELIEF MANAGER, PART II.

Gratuitous relief.

86. *Gratuitous relief.*—*In limine*, it must be laid down that in no case should such be administered except where work cannot be demanded, owing either to the physical inability of the recipients, or the existence of such strong prejudices as make death preferable to employment on earthwork. In many such cases the spinning and weaving relief will be of considerable advantage in subjecting the recipients of relief to some test. But still in many

cases the necessity for entirely gratuitous relief must exist. I have already asserted my preference for this relief taking the form of village distribution in money or food rather than that of the institution of *Unnochutters* (relief centres). I have also shown how we were in 1866 driven to adopt the latter course; firstly, in that, when famine became recognised, we were already surrounded with thousands absolutely dying of hunger, and it was imperative that all other considerations should yield to the pressing necessity of putting food in a digestible form before the starving; secondly, through the absence of any such establishment as the village relief system necessitates, and without which it cannot be efficiently carried out. So circumstanced we had to commence by establishing throughout the district *Unnochutters** to which the neighbouring population might flock for food. As many of these were houseless we had to provide shelter for them; large sheds were erected, but it is almost certain that the indiscriminate crowding together of persons of both the sexes led to the utmost demoralization.

Objections to cooked food distributions and to large relief houses.

87. This is but one of the objections I have to the *chutter* system, which has, during the late famine, been tried in every shape and form, and, it may be said, during the year 1867, under very favorable circumstances. That the distribution should take the shape of cooked food is another objection, since it is a mode of relief which consciously degrades the recipients. It certainly acts as a check in preventing many from applying for relief; but, while some of those kept away may be no proper objects, I believe the greater portion would be those whose caste prejudice and not uncommendable pride would rather meet death than degradation. It was such that were often seen searching for their scanty meal amongst the wild herbs growing in the field, and whose emaciated forms told of the suffering they must have undergone rather than accept the relief that was offered in so hateful a form. To make such persons suffer because there are others who are mere impostors is a course that cannot, I think, be upheld. With a trustworthy establishment the duty of discrimination should by no means be ignored; and, that duty being recognized, the line drawn by the willingness to accept of degradation in order to preserve life should be removed.

Summary.

88. The view I take then of gratuitous relief is this,—the distribution should be made in money if food is easily obtainable; if not, it should be made in raw food, such being purchased for the purpose by the relieving officers.

Keeping the people at home is possible if the famine be foreseen.

89. If the famine is foreseen, by the timely conveyance of this relief to the people they would be enabled to remain in their homes. The expense that would be incurred by the relief officers in repairing their habitations would be trifling compared with the cost of providing them with shelter elsewhere. This, the village relief, it appears to me, is the best form gratuitous relief can take. The advantages that have accrued from its adoption during the year 1867 have, in the Cuttack district, been most marked and fully warrant such an opinion. The

* *Chutter* or *Unnochutter*, poor-house or relief-centre.

relief is offered in a form much more acceptable to the recipients; the danger of imposition is provided against by trustworthy and efficient distributors; the cost is much less, for the people in their homes could make their supplies go twice as far, and the cheating and waste that will inevitably take place under the *unnochutter* system are almost entirely avoided.

If famine not foreseen, some provision must be made for the houseless at central localities.

90. When, however, a famine is not recognized until it has made considerable advance, many will have become houseless, and for these at central localities it will be necessary to provide shelter. This should be done by substituting small huts for the large sheds that have hitherto been erected for the purpose. Privacy is thereby secured and demoralization prevented at a cost but insignificant when compared with the result at stake.

With the view of making easy the consideration of the various measures to be adopted in administering relief gratuitously, I will take them as far as they were essayed in the late famine in the chronological order of their introduction. First of all came the relief by cooked food at *unnochutters*, and then the village system by which people obtained relief by food or money in their own houses. To this must be added the method now advocated in supersession of cooked food distribution at *unnochutters*, *viz.*, raw food or money distribution in relief villages. A full consideration of the first mentioned, the cooked food system, will leave little to be said with regard to the other two systems, as it will merely remain to note wherein the arrangements they necessitate differ from those required by the cooked food system. I then take first of all for consideration the cooked food system.

Buildings for a relief centre. A cluster of huts preferable to a single large shed.

91. When the cooked food system is adopted (as it has been during the late famine), the *unnochutters* should be situated so that no place be more than six to eight miles distant from at least one such refuge.* The map appended to Part I. shows the extent of relief operations in Orissa in 1867, and may be taken as a fair representation of the way in which these refuges should be scattered. The number of people at each will of course much depend on the frequency of such institutions, and this again will in a great measure depend on the severity of the distress in any particular locality. The numbers fed daily at each *chutter* will probably average from 500 to 1,000; a great proportion of these will always be found to be houseless and to have come not for food only but for shelter. I would at once discard the idea of again adopting for this purpose the system of large sheds in which people of both sexes must be huddled together to the extermination of all feeling of shame, and would substitute small huts such as I have already proposed. It will be found necessary to have at least 50 of these huts erected at each place, of which the cost would be about Rs. 800 to 1,000. This appears a large sum, but in any famine large sums will have to be dealt with; the saving effected by the erection of large sheds would be found to be merely Rs. 100 or Rs. 200 in each case, or, for a distressed tract of the extent of the Cuttack district,

[* The number of relief centres in Orissa during 1867 fluctuated. The maximum number open at any one time was 66, namely 10 in Balasore, 36 in Cuttack, 20 in Pooree, in all 66.—J. G.]

at the very outside Rs. 6,000 —surely a sum not to be weighed in the balance against anything like the demoralization of a people. Further, I would suggest that any such congeries of houses as is here contemplated should be erected in an orderly fashion, so that the houses may in reality form a small compact village with the necessary road and pathway. The famine over, the utility of such an arrangement would, probably, become apparent, inasmuch as the village might remain intact.

Site for relief centre.

92. Wherever possible the banks of a river should be selected as the site of the buildings, and if possible the southern bank. I say the southern bank since, the prevailing wind being from the south,* noxious vapours that must always emanate from a collection of diseased persons would be swept away without coming in contact with the lungs of their fellow men. No matter what care is taken of the people their weak and emaciated state makes them listless and helpless; and the trouble of bathing, of washing their clothes, or of attending to the simplest arrangements for conservancy becomes too much for them. Under such circumstances the greatest care can hardly keep the atmosphere pure; all that can reasonably be expected is to prevent its becoming actually pestilential. A river in such cases forms the best and most efficient means of conservancy, a matter in which efficiency is of the most vital importance not only to the recipient of the relief but also to the nieghbourhood at large.

Easy reach of grain depôt.

93. Whenever Government imports grain, the *unnochutters* should be situated in close proximity to the sale golahs either of Government or of the relief department. If of the latter, there will be no necessity for a separate grain store; if the former, the store need be but a small one of, say, 200 maunds.

Boats also should be entertained in the rains. All ferry tolls to be abolished during relief measures.

94. In the rains (and this remark must also apply to sale golahs) it will probably be necessary to place boats on the rivers in the neighbourhood of the *unnochutter* or golah on a pay of some 10 to 20 rupees each per mensem to ferry across free of charge every one seeking for relief in any form. There must be notice boards placed at the *ghâts* setting forth that no remuneration is to be given to the boatmen. This measure of chartering boats at the expense of the relief department was adopted with considerable advantage during the late famine, and it was found that the people as a rule did not attempt to give any fee. The boats should be placed on the strength of the nearest relief establishment, and should be under the supervision of the nearest relief darogah. When the district is intersected with innumerable waterways, which in the rains become deep and rapid rivers, the additional relief afforded in this way was of a most salutary nature. In the case of regular ferries, the farmers of which cannot be robbed of their right to passengers, an arrangement should be entered into by which for a small subsidy they should undertake to cross all those seeking relief without making any demand for payment, and above all without any delay. It is that delay, that long shivering on the river

[* If, as usually happens, the severest distress fall during the south-west monsoon.—J. G.]

bank in the pouring rain, which in the rains of 1866 caused the death of many of those seeking relief.

Out-houses and hospital.

95. In addition to the buildings already mentioned under the cooked food system, a cook-room, a shed for storing wood, and a shed for cleaning the grain will be required. A hospital also will have to form an invariable annex to every relief village.

Scale of diet.

96. The following has been found to a fair and proper daily ration for adults and children. It was in force from 1st October 1866, up to the close of the operations:—

	(Calcutta weight.) Chittacks.
Rice.*	
Adult, per diem at two meals	13
Child, do. do.	8
Oil.	
Adult or child, per diem at two meals	0½
Salt.	
Adult or child	0½

To every maund of cooked rice 8 seers of cooked dhâl were allowed; 13 or 14 seers of raw rice will make a maund of cooked rice, and 1 or 1¼ seer of dhâl will make 8 seers of cooked dhâl. Whenever dhâl was discontinued vegetables or fish were given. Extra luxuries were allowed in the hospitals as the Medical Inspector saw fit to direct. During the rains of 1866, when the famine was at its height, two cheroots per diem were served out to each adult. This was found of use in keeping up their spirits, and in some way fortifying them against the cold and damp of the rainy season.

Ghee was also originally given, but was discontinued when the famine assumed a milder form.

Objections against relief houses.

51. The objections that may be urged against relief houses are (1) the demoralization that inevitably ensues from crowds of both sexes being huddled together; (2) the unhealthy tendency there always must be in crowds of such a nature to depression of spirits owing to surrounding sights and offensive smells; and (3) the feeling of degradation that must wherever degradation is possible, accompany such an unaccustomed way of living. The second objection is touched on by Colonel Smith in his Part II., Para. 6, as "that mournful prostration so common among the helpless paupers of the relief houses." The objection I have to cooked food, even when cooked by Brahmins, is, that relief in such a form is not acceptable to many deserving of it, and that, in all other cases than where the system of large relief houses is adopted, it is practically inconvenient. Indeed, such a method of distribution lays down that it is the duty of the relieving officers to relieve only the

* The rice allowance is slightly excessive, but this is almost unavoidable because of pilfering by the *Unnochutter* subordinates.

actually *starving*, or to compel a relinquishment of prejudice, rather than that it is their duty find out the deserving objects and administer relief to them in the most acceptable way at their disposal. I need hardly say that where such ideas are entertained, efficient administration of relief is impracticable. Participation in relief by cooked food lays the axe to the root of a certain independence of feeling which the acceptance of raw food would only slightly affect; and doing so inevitably degrades the recipient.

In Orissa the impossibility of dispersing at once the crowds collected.

52. In Orissa, with, up to April [1867] an utterly insufficient staff of officers and establishment, it was impossible by substituting other means of relief at once to dissipate the crowds assembled at the relief houses. Time and the introduction of other subsidiary measures of relief have at length succeeded in gradually effecting their dispersion.

Raw food to be substituted for cooked, and small huts for large relief houses.

53. I would substitute raw food for cooked food; and for relief houses, huts. The number of huts necessary would be diminished in proportion to the early appreciation of the approaching calamity, For if the calamity be anticipated the mass of the people might be kept at home and their houses either repaired for them or they provided with money to enable them to do so; in either case they would not become houseless. But in any extreme famine it is certain that many will become so, both from their eagerness to hasten where they suppose food to be more obtainable, or else, from being ejected by those members of their families with whom they have hitherto lived, but whose narrowed means have now compelled them to regard self-preservation as their first object. For these, at distances of about 10 or 15 miles, villages should be built, small first of all and increasing in size as the people flock in, just as in the case of the camps for light labour gangs. If the famine be appreciated in time, and simultaneous action be taken in various parts of the distressed localities no excessive pressure attending one point, need be apprehended. The sites for such villages should be selected with reference to their salubrity and accessibility.

In short, the difference from the relief house system would be, first of all, an effort to keep the people at home by repairing their houses, and when that may in some cases fail, the erection of several small huts in the place of the large relief house. That this latter course would be much more acceptable to those obtaining relief, would tend to obviate the danger of demoralization, and be but slightly more expensive, is evident. The huts should be of such a size as to house 10 persons, and of a somewhat permanent nature; the people should be allowed to select their own companions; this course would, I am confident, much diminish the evil necessarily attendant on the collection of crowds in large relief houses, and would, at the same time, keep up an independent spirit, and help to preserve what many a Hindu prizes more than life, his caste. On sanitary grounds also it would be preferable.

An estimate of the cost of a hut with description of materials is appended.

Estimate of cost of a hut with description of materials.

18 Feet Length.	15 Feet Breadth.	Rs.	A.	P.
Grass @ 700 bundles per Re. 1 and cart hire	... ...	4	8	0
300 Belingee bamboos @ Re. 1-8	... ...	4	8	0
Cart hire for conveying above	... ...	0	12	0
6 coojee barrahatty @ Ans. 6 each	... ...	2	4	0
Cart hire for ditto	... ...	0	4	0
3 sannee, each Ans. 3	... ...	0	9	0
Goyals for walls	... ...	2	0	0
Cart hire for goyals	... ...	0	8	0
Nuthe (or brushwood ties)	... ...	1	0	0
Carpenter's hire for 3 days @ Ans. 5 per day	... ...	0	15	0
20 Coolies @ 3 each	... ...	3	12	0
Brushwood	... ...	0	8	0
	Total ...	21	8	0

This estimate is rather over than under the mark. The walls are tolerably substantial, being what is generally denominated "wattle and dab."

Management at relief villages.

54. To each village so formed should be attached a hospital for the sick, *i.e.* such as require medical attendance and care. Each village should be frequently inspected, and those who have become able-bodied should be sent to the nearest light labour encampment. For those not sufficiently strong to be turned out, but equal to doing some light work, spinning and such like work should be provided. The remainder should be relieved gratuitously. The relief of these villages should take the form of a weekly or monthly distribution of food, the clothing necessary, and perhaps, a money gratuity calculated at a pice a head per diem to enable the people to purchase such necessaries as salt, dhâll, &c. With rice-eating populations efficient measures should be taken to provide a plentiful supply of salt, as this condiment is of great importance in keeping the people in a healthy state of body—such a method of relief would be agreeable to all—many would probably leave for their homes when they had obtained their first or second supply of food.

Rules of admittance and registration at Relief Centres, drawn up by Mr. Kirkwood, Relief Manager, Cuttack.

The mohurrir at each centre will, on the [date] [ ] at the morning meal, enter in the two books, which will be sent to him, the name of every *kungallee** fed in the *chutter*.†

2. He will record against the name the residence, caste, age, husband dead or not, father or mother dead or not, the date of admission, whether clothes should be given or not, date on which any clothes may have been given, or other special gift may have been made,

* *Kungallee* or *kangal*, pauper.

† *Chutter* or *unnochutter*, poor-house or relief centre.

date of death or leaving the *chutter*, condition at time of leaving, departure from *chutter* voluntarily or not; and any other remarks.

3. All well able to work must be excluded from the *chutter*. Each *chutter* will have tickets of a different colour, or shape furnished to it by the Relief Manager, and on the ticket the name of the *chutter*, and the Relief Manager's name will be stamped.

4. To every *kungallee* such a ticket will be given and tied round his neck, or otherwise attached to his person, and on it his name will be written.

5. The tickets to be all numbered, and to be issued according to the number they bear. The number of the ticket will correspond with the number in the register of *kungallees*. Inspecting Officers will compare on their periodical visits the number entered in the register with the number recorded on the ticket, and will call the *kungallees* according to the names entered in the register and see that the particulars agree.

6. Each *kungallee* must show his ticket before he sits down to his meal, and, if the ticket belongs to any other *chutter*, the *kungallee* having such ticket must be forthwith expelled, and be warned to go back to his own *chutter*. If no ticket is found with any *kungallee*, the mohurrir must see whether he is able to work or not, and if physically incapable of labor, he is to be admitted to the *chutter*, and his name entered in the book.

[It was the duty of the Darogah in charge of the centre, and all Inspecting Officers to send off either to light labor gangs or to regular work all those who were no longer deserving of gratuitous relief. These might, of course, go home in preference, and obtain relief as spinners and weavers, or in any other way that might be more congenial to them. A peon was in general sent with those ejected to the nearest light labor gangs, so as to leave no opening for a complaint that they had no knowledge of where to get a living. It is necessary in all such cases that the refusal of admission to the *unnochutter* should be continuous; it is the chance of now and then getting in that can alone induce the indolent and vagabond to hang on in the vicinity till they become really fit objects for relief.]

7. When any *kungallee* is discharged, his ticket is to be taken back and destroyed. If tickets are wanting, an indent with a report is to be made.

[The tickets being of paper were found to be quickly destroyed and for the effectual working of these rules in future tin tickets, bearing the name of the centre, and numbered consecutively, should be used. The tickets should not be destroyed, but kept for fresh admissions.]

[Of those fed in the centres many may be found able to do some very slight work; these should be made to spin, and spinning machines should be provided for them. They may be remunerated for the work done at some low rate in addition to their daily supply of food. Some slight stimulus will thereby be given to healthy exertion, and any extra outlay incurred will be far more than re-paid. With the view to some such healthy exertion, gardens were attached to each *unnochutter*, but this plan did not answer owing to the work being in some measure a work of skill and as such eminently unsuitable to those for whom

it was intended; practically, paid coolies always had to be entertained, and the garden produce in no way reimbursed the outlay made.]

Control over Relief Centres (Cuttack).—The darogah or mohurir of each Centre should be provided with a fixed advance to meet the necessary expenditure. Thus, supposing that Rs. 200 or 300 are given him to start with, as soon as his first month's accounts are passed, he will be reimbursed to the extent of the amount passed, and so the advance will remain permanent. To this end it is very important that the office establishments should have been already formed and ready for work before the relief operations have actually commenced, and that the accounts should never, afterwards, be allowed to get into arrears.

With regard to cash expenditure by darogahs in charge of relief centres, the following was the scale adopted in Cuttack district during the greater part of 1867:—

Names of Articles.	Quantity.	Amount.
		Rs. A. P.
Mustard oil	Cuttack seer of 105 tolahs	0 6 4
Haldai	Ditto	0 2 6
Salt	Ditto	0 3 6
Brinjals	Ditto	0 1 3
Raw plantains	2 Gundas	0 0 6
Drumstick (Soojna danta)	2 Ditto	0 1 0
Moong dal (Green dal)	Seer	0 2 9
Berri „ (Black ditto)	Ditto	0 2 0
Arur „ (Red ditto)	Ditto	0 2 6
Soonagai bamboos	Per 100	3 0 0
Kanta bamboo (thorn)...	Ditto	4 12 0
Thatching grass	300 Bundles	1 0 0
Milk	Seer	0 1 3
Chunam	Ditto	0 2 0
Talputtas tattees (without bamboo) ...	Per 100 square feet	0 11 0
Handles for tools	Each	0 0 1½
Cane baskets	Ditto	0 1 0
Bamboo baskets	Ditto	0 0 4

If charges were made under the above they remained unaltered, if over the above they were cut down to it. I am aware that any tariff of this nature cannot hold for general use; but I have given it with the view of conveying some sort of idea of the articles required, and of their price in a time of scarcity. The numbers entered in the Darogah's Book E. were checked by every Inspecting Relief Officer, and if the entries were not up to date, or were proved false, the Darogah was fined and the circumstances reported to the Relief Manager for his information and for confirmation of the fine.

Forms of Relief Accounts recommended by Mr. Kirkwood.

I.—Return A. of Rice Stock (Weekly).

(1-6)—Receipt.

(1), Month and date; (2), whence received; (3), quantity entered in chellan; (4), quantity of short weight; (5), net amount received by darogah; (6), total.

(7)—EXPENDITURE.

(7), Quantity expended during the day.

(8)—BALANCE.

(8), Balance remaining in store at the end of the day.

(9-18)—DISBURSEMENT.

(9), Quantity sold; (10), quantity cooked for *kungallees;* (11), quantity given to the hospital; (12), quantity handed over to the cotton mohurrir; (13), quantity of raw rice expended in house relief (14), any extraordinary rice expenditure; (15), quantity of *khood** (16), quantity of *koonda** (17), weight of bags; (18), total expenditure.

II.—RETURN B. OF MONEY TRANSACTIONS (WEEKLY).

(1-2)—RECEIPT.

(1), Month and date; (2), particulars of receipt.

(3-10)—EXPENDITURE.

(3), Amount; (4),daily total; (5), month and date; (6), particulars of disbursement; (7), statement of the head in No. 5 under which it falls; (8), amount; (9), daily total; (10), balance.

III.—RETURN C. OF RICE SALES (WEEKLY).

Sale of Rice, Koonda, &c.

(1-5)—RECEIPT.

(1), Month and date; (2), amount sold (without bags); (3), clean or dhanwar; (4), rate of sale; (5), price realized.

(6-9)—DISBURSEMENT.

(6), Particulars of disbursement; (7), amount disbursed; (8) balance in hand; (9), remarks.

IV.—STATEMENT D. FOR WHOLE DISTRICT (MONTHLY).

STATEMENT showing Stock of Rice received and issued by the Relief Centres of District for 186

(1). Names of Centre; (2), Quantity of rice in hand by tale and weight; (3), received during the month; (4), total; (5), distributed gratuitously; (6), sold; (7), handed over to the cotton mohurrir; (8), rice made over to the Deputy Collector; (11), empty bags by tale [and weight] per month; (12), total disbursed; (13), balance in hand; (14), value of rice handed over to the cotton mohurrir; (15), (16), (17), amount realized by sale;—of rice; of other articles—khoonda, khood, &c.; (20), remarks.

* *Khood* and *koonda* are the broken rice and husk that result from the operation of cleaning the rice.

V.—Statement E.* (Monthly.)

Return of Relieving Operations at the Centre of for the month of viz. from the to the 186

(1) Name of relief centre; (2) number of persons relieved capable of performing some light labor from whom some work was required,—(*a*) adults and (*b*) children; (3), physically incapable of labor, (*a*) adults and (*b*) children; (4, 5, 6) expended in relieving the persons enumerated in columns 2 and 3 (*a*) rice; (*b*) money given in cash to *kungallees*; (*c*) all expenditure in feeding.

(7 to 13)—Other money expenditure.

(7) In payment of ordinary establishment; (8) in erection of building; (9) in purchase of clothing; (10) in transport of rice; (11) in payment of hospital establishment; (12) in payment of medicines for hospital use; (13) other items of expenditure.

(14) total of columns 5 to 13; (15) number of deaths; (16) remarks.

Relief at Poor-Houses with uncooked grain.

[Mr. Kirkwood.—Cuttack, 1867.]

Distribution of grain at central localities. Precautions.

If the distribution takes the shape of raw food or money at certain central localities the only difference would be that no cooks or watermen would be required on the regular *chutter* establishment, though on the hospital establishment they must still remain. In such case too I would recommend that the distribution be a fortnightly one. If this is done, the rules regarding the keeping up of the registers, &c., must be most strictly attended to, in order to obviate the danger of the recipients moving to other places and receiving relief two or three times over.

Under such an arrangement one Darogah would be able to conduct the work of four or five centres, paying a fortnightly visit of two days to each for the purpose of making the distribution. A considerable expense in establishment would thereby be saved; the relief would be given in a form much more acceptable to the recipients, and very probably many would, when provided with their supply, leave the relief houses and go off to their homes, or where their homes had been. In no place can relief be so effectually administered as in the recipient's own house, and when added to this the preservation of position and name, and the rescue from gross demoralization is taken into account the advantages of such a means of relief are most obvious. This introduces the system next for consideration, the village relief, or relief to people still dwelling in their own homesteads.

Ganjam, 1866, Admission and exclusion,—cooking, distribution, and cost.

[Mr. Gordon Forbes, c.s., Collector.]

The plan which was found to succeed best was to enclose the open space round the *chuttrum*, † with a fence, and to admit within the en-

* In this as in other cases I reproduce Mr. Kirkwood's statements, reducing them to letter press instead of column form, and adding some explanatory words. They are useful as showing the points of control to be watched, but the statements themselves seem too lengthy. This mixing up of stock and personnel in one and the same return would sometimes prove inconvenient in practice.—J. G.

† *Chuttrum*, same word as *chutter*, *anno-chutter*, poor-house.

closure all comers. Then to arrange the people into rows of men, women, and children, who were all made to sit down on the ground. Some person of authority then went round and ordered all who seemed undeserving of relief to leave the enclosure. After this the distribution began. The children and mothers were fed first, then the women, and lastly the men. A responsible person accompanied the distributors, as they went along the rows with their large baskets of cooked rice, pots of umbly or *ragi* porridge, and saw that the quantity given to each was proportioned to the need of the receiver, though this proportion was small enough, and at first only given once a day. Afterwards, when the funds at the disposal of the committee were large, the quantity of the dole was increased, and the very weak were allowed a second meal in the morning, the main distribution being at about 4 P. M. At most places there was only one house of relief, but when the numbers exceeded 600 or 700, it was found convenient to divide the people and have separate kitchens.

There were nine relief houses maintained out of the funds of the Famine Committee. The cost of these houses may be stated at 60,000 rupees up to the end of the present year, at (with all the outlay in carriage, buildings, servants, &c., included) a cost per head of Rs. 1-8. This mode of relief was more expensive than that of the distribution of uncooked food, owing to expenses incurred in buildings for shelter and cooking, servants' wages, and utensils; but the people usually fed here could not be relieved in the other way, as there were large numbers of strangers and beggars who had come from distant places. Besides, it was necessary to check the number of applicants, which would have been unlimited had merely a distribution of uncooked rice been adopted. Few of the labouring classes who could obtain work would degrade themselves by feeding at these *chuttrums*.

We have already remarked the method of distribution; but with regard to servants, we may add, that there was usually some responsible man who had the general supervision of the relief house In some cases he was paid; in the others he was not, being a subordinate official or peon. For a house feeding about 500 people, three or four cooks were retained on a monthly salary of from three to six rupees each. They were assisted at the time of distribution by village servants and the police, the former receiving some small remuneration. It was carefully ascertained how many persons a certain quantity of rice and *ragi* was capable of supplying with a good meal. At the time of distribution, some person of good authority, being a member of the local committee, was present to see that all received a proper allowance. Occasionally the boiled rice was measured, and thus a check was kept upon cooks and other servants. A bag of rice, cotaining on an average 90 uddas or 70 seers, together with half a bag of *ragi* containing rather more, was usually found sufficient to feed from 200 to 250 people, varying according to the proportion of children to adults and the physical condition of the recipients. As many of those who fed at the *chuttrums* came from distant villages and from other districts, it was found necessary to provide shelter for them during the rains; consequently, as already stated, sheds were built usually within the *chuttrum* enclosure. The construction was simple and inexpensive; a long bamboo shed about eight feet high and ten feet wide (the length varying according to circumstances), thatched

with straw, and partly walled with bamboos covered over with mud, afforded sufficient shelter. Many of the people, however, preferred sleeping upon some friendly *pial* in the villages. One or more such sheds were constructed at each relief house.

In addition to the houses already mentioned, are the relief houses maintained by the Court of Wards at Kimedi, Barwa, Jaluntra, and Beridi, at a total cost to the estates of 8,500 rupees. Between 600 and 700 people were fed at these houses on an average. Six zemindars also maintained houses, but at what cost and what the number of people was who were relieved cannot be exactly given. About 4,000 may be set down as the average number of those who were thus maintained during the worst months. The total cost may have been 30,000 rupees; consequently, the money expended on this species of relief throughout the whole district [Ganjam] may be roughly estimated at a lakh.

Shevagunga Zemindari, in MADURA, 1866.—Admission by ticket.—Distribution of cooked food.

(FROM MR. DALYELL'S MEMOIR ON THE MADRAS FAMINE, 1866.)

In Madura, the landed proprietors had also assisted their tenants, and the Lessee and Manager of the Shevagunnah Zemindary had been especially active in the good work. In addition to numerous liberal measures connected with the revenue administration of the estate, the Lessee contributed Rs. 5,000 towards the formation of a Famine Relief Fund, and subscriptions amounting to Rs. 3,000 had been received up to November. Four Relief Houses had been opened, at which an average number of 1,000 persons were fed daily, on a system almost precisely the same as that laid down by the Madras Committee. It is thus described by the Agent and Manager of the estate:—

"The system under which each poor-house is conducted, is as follows:—Having secured a sufficiently commodious building at each place, a strong enclosure, large enough to accommodate about 800 or 1,000 people, is erected on its front, with one door-way only for the purpose of egress and ingress. On the ground within this enclosure, are a number of shallow trenches, about nine inches deep, and six feet apart from each other. The building before which the enclosure is erected, is for the purposes of storing and cleaning the grain and for the purposes of cooking. The hour at which the poor are fed is 3 P. M. Previous to this, the food for the day has been cooked, and brought into the centre of the enclosure ready for distribution.

"Each poor-house is managed by a Committee consisting of six working members. The duty of the first and second is to determine who are really fit objects of relief; all who, in their opinion, are not proper objects of charity, are peremptorily excluded. Relief is confined to the blind, lame, aged, sick, and others of both sexes, who from starvation, or any physical infirmity, are unable to work. To each is given a printed ticket, which insures his admission into the poor-house. Precisely at 3 o'clock the first bell rings; all who hold tickets immediately present themselves at the door of the enclosure for admission. A member of the Committee, who stands at this door, admits only such as hold tickets. As each ticket-holder is admitted, he takes up his place, and sits down in a line with the trenches on the ground in regular

order, the vessels which the poor bring with them they place into the trenches, by the side of which they sit. The men sit apart from the women, and silence and order is persistently maintained.

"When all have sat down, and the tickets have been examined, and it is seen that no unworthy object of relief has been admitted, the second bell rings, and the cooked food is at once carefully distributed; as much is given to each person as he can reasonably require. With each dole of food is also given a small ball of *chatney*, consisting of various digestive condiments. After half an hour, when all have been fully supplied with food and water, the third bell rings, and at this signal, the poor at once quit the premises. The three bells regulate the admission and dismissal of the poor, and the distribution of the food, and prevent confusion, which there would otherwise be. The rules for the management of each poor-house are strictly carried out. The food is, rice on Sundays, and *cholum* and *ragi*, on all other days, made into a palatable *conjee*. It must be eaten on the spot; none is allowed, except by special permission, to leave the premises. Relief is extended to all who are fit objects of charity, irrespective of caste and creed, and they are treated with pity and compassion. The grain purchased for the poor is the best procurable, and is carefully cleaned and cooked, the provisioning and cooking departments being under the immediate supervision and orders of the third and fourth Members of the Committee. Each poor-house, with its enclosure, and all the cooking and other vessels, are always kept scrupulously clean. Any respectable person is at liberty to visit a poor-house, and to make whatever remarks he pleases as to how it is conducted, &c., in the visitor's book, which will be expressly handed to him for the purpose by the sixth Member of the Committee, who generally resides on the premises."

In view to relieving the tightness of the grain market, the agent of the estate had also established fairs at the chief towns and larger villages, for he found that though many persons had money to buy grain, they had the greatest difficulty in obtaining it.

Madras Town, 1866.—Cooked food (also money payments by ticket.)

[From note by Mr. Dalyell, c. s., cited in Parliamentary Blue Book on Madras Famine, 1866.]

Cooked food.

The arrangements made for the alleviation of distress in the town of Madras must now be noticed. The town committee's proposals to establish poor relief houses for the issue of cooked food to those unable to labour, and to issue small sums of money to those unable to attend at the relief houses were approved by the general committee at their second meeting, and the following statement exhibits the number of relief houses opened, with the number of persons relieved at each by the issue of food or money, and the total expenditure from the Town Relief Fund on this account, up to the 31st August.

[Statement omitted. It shows an average number of 1,372 persons fed daily.]

Money payments.

The sub-committee in charge of each relief house issues tickets to applicants after an inquiry into their circumstances, and no tickets are given to persons who are able to obtain their livelihood by labour, the relief being thus limited to the old, the young, and the infirm. The money payments made by each relief house sub-committee are restricted as much as possible, and are only given to those who by caste, or by extreme age or infirmity, are not able to attend at the relief house. They are limited to a payment of Rs. 2 per mensem, or (in the case of a family) of not less than Rs. 4 to Rs 3-8 per mensem, payable at the discretion of the sub-committee either weekly or monthly. As shown in the statement, however, a sum of Rs. 485 has been expended by the Rev. Dr. S. Fennelly and Mr. J. G. Coleman, in giving money relief to those of the European and Eurasian population on whom the high prices press with peculiar severity. A grant of Rs. 600 has been made from the Town Relief Fund to the Madras Friend-in-Need Society, which has likewise been expended in assisting these classes.

Salem and North Arcot, 1866.

[From memorandum by Mr. Ellis, Cited in Parliamentary Blue Book on the Madras Famine, 1866.]

Cooked food.—Casual relief,—in certain cases uncooked food and money.

Relief houses.

One of the first and most immediate effects of the violent rise in the price of food grains, accompanied by a rapid decrease in the demand for agricultural labor, was to leave entirely without means of support the large mass of permanent pauperism which, in ordinary times, is sustained by the charity of the community. To these, as disease became more or less prevalent, were added the children who had lost their parents, women who had been deserted by or lost their husbands, and others who, by caste prejudice, were unable to avail themselves of the labor offered at the public works.

To meet the wants of the helpless poor, relief houses have been opened in both districts. No large town in the distressed tract is without its relief house, where hundreds are daily fed. Other relief houses have been opened in centrally situated villages, and to these the aged and infirm from the neighbouring villages resort for their daily meal.

Twelve thousand rupees have been already granted by the Madras General Relief Committee to the Collectors of North Arcot and Salem, and subscriptions have been raised in the principal towns in both districts. It will be necessary still further to supplement the funds of the relief houses in the Salem district; but in North Arcot this will not be required, for, in addition to the grants made from the relief fund and local subscriptions, there are the accumulations of the endowment known as the "Lungerkhana Fund," which are available for the support of the poor at the relief houses.

In both districts it will probably be necessary to keep the relief houses open for some months, for, until prices are considerably reduced, it is not probable that the charity of the community will be available for the support of even the ordinary pauperism of the country which, from various causes, has been considerably increased.

I personally visited a large number of these relief houses. When I commenced my tour of inspection, they had only been recently opened, and there was, as might be naturally expected, great variety of system and occasional mistakes. The system, which is at present general in both districts, seems well calculated to relieve the helpless poor without affording encouragement to mendicancy.

The relief is almost entirely of cooked food; when the relief is continuous, tickets are issued, after inquiry, to the recipients. Casual relief is given to persons evidently suffering hunger, who may be present at the time of the distribution of food.

The rule is, that the cooked food is to be consumed at the relief house, and not carried away. In exceptional cases, such as the Mahomedan women who cannot appear in public, but who are in great distress, the food is sent to them by their male relatives. In rare instances small doles of money have been given to sustain the aged and infirm persons of respectability, who are suffering severely from the present high prices.

The superintendence of these relief houses has thrown great additional labor upon the public officers of all grades. This work has been most cheerfully done by all, and the natives of respectability in both districts have willingly assisted.

In the Salem district there are 33 relief houses. I have not yet received an exact return of the large numbers who are being relieved at these houses, and which are subject to great fluctuations; but some idea may be formed from the return received from North Arcot, in which district are 17 relief houses, where 6,000 persons are fed daily.

I heard Natives of all classes speaking in terms of approbation of the system pursued in affording relief to the aged and infirm, and I concur in the opinion unanimously expressed in these districts, that these houses of relief have been the means of saving many lives.

Difficulty of maintaining order—Hissar, 1869.

[Mr. Purser, Deputy Commissioner, cited by Mr. Lepel Griffin.]

Placed as Hissar is, as the frontier post between the British and Native territories, it is only to be expected that it will be first affected by the influx of the starving population of the latter; who being uncared for by their own rulers, seek refuge in the former, where some attempt, however imperfect, is made to relieve the wants of the needy. During the last few days there has been a stream of people coming in from the surrounding Native States. The returns do not show this, because they are not kept up in such a way as to show the daily number of persons receiving relief. These are divided into two classes,—those with tickets, and those without. The former get bread; the latter grain. No new arrivals ever get tickets, and those without tickets are only counted once a week. I do not see the object of the distinction, and the sooner it is discontinued the better. The difficulties in the way of properly distributing relief are enormous, and can only be met by proper supervision, which at present is not available.

The people are so reduced by starvation and want that their bodies are almost rotten; the least blow brings on a festering sore. To use physical force to such is impossible. Many of them are so wild with

hunger, and others wish to get more than their share by scrambling, that orders to quiet and to wait till the turn of each person comes are quite unheeded, and as soon as the food is brought a general rush takes place, and the people shove and scramble like so many wild beasts. It may be possible to stop this. The distribution of food now takes place outside the town instead of inside. Six rows of stables have been placed at the disposal of the Relief Committee, which afford admirable shelter to the foreign poor. They prefer in fine weather loafing about and sleeping on the banks of the canal; but when it rains they seek the shelter of those buildings, where every arrangement has been made to supply them with water and everything else required. Even if there be more rain, and that all over the district, it must be expected that distress will grow more and more intense for the next two or three months. The number of able-bodied poor seeking work will probably diminish, as many will be employed in agricultural operations; but the number of infirm seeking relief will increase.

Difficulty from excessive timidity in accepting relief.

(From Allahabad Central Committee's Report p. 25.)

Allahabad, 1869.—The relief operations in this district, though of long duration, extending from 24th January to 15th December 1869, were mainly confined to those poor paralyzed persons in the Barah and Khyragurh Tehseels, whose disease is attributed to the use of kesaree dhâl. The average number of those receiving assistance was never higher than 417 daily; and when in other districts the recipients of relief were numbered by thousands, in Allahabad they did not exceed 200 per diem. 87,576 individuals were relieved at a cost of Rs. 10,546. By far the largest portion of those relieved consisted of men, the women numbering 22,773 and the children 4,133, against 60,670 men. The cost per head was nearly 2 annas, being a fraction over 1 anna 11 pies. This is excessively high and is not to be accounted for by prices being much higher than in other districts, as the average rate for wheat has not been lower than in Jhansie or Moradabad, Shahjehanpore and Muttra, while prices have never ranged so high as in Bijnour and Lullutpore.

Difficulty from excessive timidity in accepting relief.

In addition to those relieved at the poor-houses, assistance, but on a very limited scale, was given to *purdah-nusheens* and other respectable persons who would rather have died than have gone to the poor-houses; and the Rev. T. Evans in the city, and Colonel Wright and the Officers of the 11th Lancers at Papamow, further exerted themselves to relieve the destitute. Colonel Wright mentioned an instance of the want of confidence in Europeans which finds not infrequent practical expression among the uneducated poor of the country—a feeling which is at the bottom of those baseless rumours about sacrifices of children, and the like, which are sometimes aired. Some tiny children, deserted by their parents, were found about the stables of the cavalry, picking the undigested corn out of the stable-litter. Colonel Wright had these little fellows fed at his expense by the regimental grain-dealer; and as he wished to see that they were really looked after, he gave orders that they should be present when he came down in the morning for

stable inspection. To have good meals given them daily without any ostensible reason, and then to find that they were to be paraded before the "Sahib," were matters pregnant with mystery—a mystery which the elder boys solved by deciding that all this ceremony portended their own sacrifice by the "Sahib," otherwise why should he ask if they were getting fat? The result of these deliberations was that the majority of the children disappeared, their anticipations being too terrible to allow of their continuing in such a dangerous neighbourhood.

The relief given at the poor-houses could have made but little impression on the distress which was, doubtless, prevalent in the district. But an immense amount of private charity was distributed by the wealthier merchants in the city, and there were no conspicuous tokens that further measures of relief than those organized were required for the Allahabad district.

Scale of diet at Ajmere Relief House, 1869.

[From Colonel Brooke's Report on Rajputana Famine, 1869.]

Scale of rations and mortality.

The diet at Ajmere was unground wheat and gram boiled, and kichree (bajra and dhâl) on alternative days, and subsequently chuppattees and dhâl, and rice and dhâl. The quantities were 20 ounces to adults of both sexes, 12 ounces to youths, and 4 ounces to children below five years of age. Extra allowance of 4 ounces a day were also given to those whom the Doctor pointed out as requiring it. The scale, it will be seen, was actually higher in the case of adults than what the wages of a day laborer at the relief works could purchase. Notwithstanding this liberal allowance, many died from the emaciated condition in which they arrived. The mortality in the poor-houses was as follows:—

Mortality in	Ajmere poor-house	.. ..	1,387
Ditto	Beawr "	.. ..	669
Ditto	Todgurh "	.. ..	276
Ditto	Nusseerabad "	.. ..	241
		Total ..	2,573

North-West Provinces, 1868-69.

(From Mr. Henvey's Report.)

Principles observed.*

In the poor-houses, as before remarked, the two principles carefully observed were—first, that none but the helpless should be relieved gratuitously; second, that as a rule those gratuitously relieved should be forced to reside as inmates until discharged. The first is essential to famine operations in this country. The second is necessary to exclude professional beggars, who would follow their trade during the day and seek refuge in the poor-house at night. But though the second principle was generally observed, it was necessary to make exceptions in favour of *purdah-nusheens, sufed-poshes*, and the like. These are women or other persons of the higher classes, who either never go abroad in public, or would feel themselves degraded by the receipt of alms in a

Relief of respectable classes.

* For table showing the extent to which relief was administered on this system throughout the N. W. P., 1869 see under "STATISTICS: Famine Finance of N. W. P. 1869." J. G.

poor-house. Such people are often in miserable plight, and it is extremely difficult to discover them. But when found, humanity forbids that they should be allowed to starve. The Central Committee gives the following details of special classes* to whom relief was thus afforded :—

Details of such relief.

Districts.	Special Classes.				
	Pensioners	Purdah-nusheens.	Sufed-poshes.	*Travellers.*	
				Men and boys.	Women and girls.
Bijnour	...	144,286	3,877	4,713	3,232
Lullutpore	...	11,512	37,782	21,669	30,957
Humeerpore	...	2,370	...	...	...
Bareilly	...	781		.	...
Budaon	...	1,076	9	1,879	798
Jhansie	135	11,769	14,696	2,097	1,699
Allahabad	25	790	963	101	40
Furruckabad	25	...	...	4,080	1,696
Moradabad	...	24,930	7,711	5,655	2,299
Mynpoorie	...	..	...	109	67
Shajehanpore	295	8,090	14	5,859	7,135
Meerut	...	586	42	19	...
Muttra	...	..	...	13,175	13,268
Azimgurh	150	46	46	482	546
Etawah	...	75	3	5,587	3,595
Banda	...	...	...	140	105
Mirzapore	...	1,292	167	68	45
	630	207,603	65,310	65,633	65,482

It will be observed that nearly 70 per cent. of *purdah-nusheens*, or women living in seclusion, were relieved in Bijnor, while Moradabad contributed 24,930, and Shajehanpore over 8,000. The preponderance in these Rohilkhund districts is perhaps to be accounted for by the large number of respectable Mussulman families whose property was forfeited in the rebellion. Such families, while maintaining all their pride, and preferring death (in the case of women) to exposure to the public gaze, would be often in destitute circumstances. The figures showing the travellers relieved accord with what is known of the line taken by emigrants, or their usual destination. The numbers are high in Rohilkhund, whither crowds of men and cattle flocked across the Ganges towards the end of 1868 and early months of 1869. Again Muttra, the whole length of which district lay across the tide of emigrants from Rajpootana and Etawah, which intervened between the Gwalior people and the Upper Doab, are marked by comparatively large figures. Lullutpore, where the number (30,957) was highest of all, was the route of emigrants from Gwalior and Dutteah to Saugor.

Great number of purdah-nusheens in Bijnour and other districts of Rohilkhund.

Remarks on the relief of travellers.

* There were also a considerable number of *purdah-nusheens* relieved in Ajmere, and more than Rs. 4,700 were expended on this object; but the numbers are not stated. The Agra Committee report the relief of 36,000 respectable women.

In dealing with paupers of the respectable classes there is a difficulty arising from the fact that such people will not apply for relief; they must be sought for and relief brought to them. In this respect the system pursued in the Native State of Rampore has advantages. Instead of collecting the poor into relief-houses, alms in food and money were entrusted to the headmen of villages, who would of course be acquainted with the most deserving cases; and the measure is said to have been successful in preventing deaths from starvation. Such a system might be worked beneficially on a small scale, and with the large establishment at command in Native States, but it implies great confidence in the agency employed.

Difficulty of dealing with paupers of respectable classes.

System adopted in Rampore of working through headmen of villages. [Village or Home Relief.]

A suggestion was made by the late Mr. R. Manderson, Collector of Moradabad, that in view of the impossibility of securing European supervision for all the poor-houses, small sums should be entrusted to private individuals who were known to distribute considerable amounts in charity. Two advantages were contemplated by this suggestion: first, that natives would be more extensively employed in the application of charity to which they so liberally subscribed; and secondly, that by such agency benevolence would be most sure to reach those classes who are too often overlooked in the administration of relief. And it was thought that the submission of nominal rolls, with an occasional visit from a responsible person, would be a sufficient check against malversation. No doubt Mr. Manderson's idea was taken from the method actually adopted in the neighbouring territory of Rampore. The Central Committee, however, though they encouraged the formation of native sub-committees, were not prepared to assent to Mr. Manderson's proposal probably because they distrusted the agency. The plan might be worth a trial on a future occasion.

Mr. R. Manderson suggested something of the same kind at Moradabad.

Advantages expected from this suggestion.

The Central Committee objected because they distrusted the agency.

RELIEF RULES and ACCOUNTS prescribed by the Allahabad Central Committee for N.-W. P., 1860-61 and 1868-69.

I.—No able-bodied person [belonging to the labouring class], whether man, woman, or child of age to carry a basket of earth, or perform other such light work, will receive relief from the committee. All such will be sent off to a labouring gang. *

II.—All who are helpless from age or physical infirmity, and who, being destitute and without the means of procuring food, may apply to the committee for relief, shall receive it in the form of food.

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* These rules are the same as those issued in 1860-61 with one exception. The first rule runs—"No able-bodied person will receive relief from the Committee. All such will be sent off to a labouring gang." The Allahabad Central Committee represented [1869] that these words would exclude respectable persons, who, though in distress, would not resort to manual labour. And it was finally determined that the words, "belonging to the labouring class" should be inserted after the words "no able-bodied person."

III.—The food so distributed shall be cooked by persons to be engaged for the purpose, care of course being taken that these persons shall be such as that none may object on the ground of caste prejudices to receive food from their hands.

IV.—The purchase, preparation, and distribution of food, may be conveniently entrusted to a Sub-Committee, composed of respectable members of the Native community, with some trustworthy officer of Government, as—*e.g.*, a Native Deputy Collector, or Tehseeldar, as their President.

V.—There shall be but one distribution of food, to be made in the presence of two or more members of the Sub-Committee at a fixed time and at a fixed place, due notice being given of both.

VI.—A full ration shall be given to each man, woman, and child relieved, and the rations of all of each class shall be uniform.

VII.—The Sub-Committee shall receive from the Committee periodical advances to enable them to purchase grain, to pay the wages of the cooks and other servants that may be required, and to meet any incidental expenses.

VIII.—These advances shall be accounted for by the Sub-Committee, who shall be required to keep up—

(1) A daily register.
(2) A cash-book, showing daily disbursements.
(3) A monthly debtor and creditor account exhibiting all advances received from the Committee, and *per contra* all disbursements made during the month, and the balance in hand at its close.

IX.—The daily register, signed at the close of each day by two or more members of the Sub-Committee, or by the President on their behalf, shall be laid daily before some member, selected for the purpose, of the Local or Central Committee, who will examine and countersign it. An extract from the cash-book for each day will be sent at its close to the same member, and at the end of the month the debtor and creditor account will be laid before the Committee at large, who will submit a copy thereof to this Government, together with a general account showing the receipts during the month :—

By donations	Rs.	0	0	0
By monthly subscriptions ..	„	0	0	0
By Government contributions ..	„	0	0	0

And the disbursements *per contra* under appropriate headings, with the balance of funds in their hands.

X.—The accounts so to be submitted shall be accompanied by the briefest report, showing the numbers received during the month, the state of distress, whether increasing or decreasing, and the expectations of the Committee as to the stability and adequacy of their funds, together with any suggestions they may wish to offer. These accounts and reports should be in the hands of Government on or before the 15th of the month, following that to which they relate.

XI.—The entries in the daily register above prescribed will be checked by the visit of some member of the Committee daily, four or five days in the week, to the place of distribution of the rations.

Jhansie, 1869.—In-door occupations. Rates allowed.

The people (are got) to do as much as possible of the work themselves, and thereby a large saving has been obtained. The people assist in erecting their sheds, in bringing in wood and grain for consumption, in grinding corn—higher castes in cooking and distributing it—and the weaver caste * * * in spinning and weaving cloth for those who come in an almost naked state. Gross idleness is punished either by a slight reduction of food or expulsion. This system has been strictly enforced to prevent imposition from the large pauper warren of professional beggars belonging to the city of Jhansie. A *mate* system for each gang of paupers has been introduced; the *mate* is answerable for the well-behaviour of his gang; besides his rations he gets one pice a day extra: hitherto the plan has answered very well.

The earnings were—grinders 12 chittacks of flour per diem, self-supporting; spinners in seven days, 10 chittacks of thread, or 8 annas, sufficient to support self and a child. Weavers were not self-supporting owing to the great depreciation of their manufactures.

Total numbers supported, and cost.

Including people fed at the police-stations, an aggregate number of 1,093,948 received relief, and the cost was Rs. 77,883-11-1;—

	Rs.	A.	P.
Central Committee sent	69,924	7	7
Subscriptions retained were	3,634	15	8
Sale-proceeds of materials were ...	1,739	4	2
Government equivalent drawn prior to January, 1869, was	2,584	15	8
Total ...	77,833	11	1

Besides the above expenditure, Rs. 603-14-11 were charged to Government as the pay of native doctors deputed to visit poor-houses.

Jhansie, 1868-69.

Principles on which relief was administered at Jhansie in 1868-69.

* * * * *

II.—It is a fundamental principle of this system of relief that all persons receiving relief should be detained all day if relieved in the morning, and if relieved in the evening that they be detained till noon next day.

III.—That for this purpose immediate steps be taken to supply two enclosures with sheds; the Sub-Committee be authorized to undertake the necessary expenditure.

IV.—That all applicants for relief shall be assembled near the dispensary every morning at 7 o'clock.

V.—That they shall then be examined by the native doctor, who shall divide them into three classes, viz.:—

(1). Those who are fit to work, and may be sent out at once on working-gangs.

(2). Those who require food and care to fit them for labour.

(3). Those who are altogether unfit for labour.

VI.—Those who come under class 1 shall be furnished with a ticket, and sent out to some working-gang under charge of a peon.

VII.—With regard to those who fall under Class 2, the native doctor shall give directions as to the kind of food with which they shall be supplied, and that such of them as require special treatment in consequence of want of food for several days shall remain for such time as may be deemed necessary under the care of the native doctor, and when he considers them out of danger that they shall be sent to the poor-house, and kept there till fit to be sent out to a working-gang.

VIII.—That any applicant who has received relief shall, when he is able to work, be compelled to perform such labour as the Sub-Committee direct, and that on his refusal to do so he shall be treated according to the circumstances.

IX.—That light labour, in the shape of grinding corn, cleaning, cording, and spinning cotton and wool, &c., shall be provided for all those who are in the poor-house and fit to undergo such labor.

Rules and practice of charitable relief at Jhansie, 1868-69, *as detailed by the Deputy Commissioner.*

Every morning the residents of the poor-house were examined and weeded; only those fit for out-door work being retained. The best were sent off in gangs to the relief works, or allowed to go whither they would. A small modicum of food was distributed before the day's work began.

Those that remained within the poor-house were divided off under the charge of mates, who, as a remuneration and incentive to good conduct, received an increase of two chittacks per diem on their food, and were exempted from all other work.

The duty of these mates was to see that order was kept and work properly done.

The paupers were divided into those fit for work, and those physically unfit, such as the old and infirm, the sickly and the children.

The former class were told off to clean and spin cotton, to weave, to build or repair sheds, to draw water, grind corn, or help in cooking operations. Those unfit for work were left in one side of the enclosure, apart from the rest, under the charge of their mates.

For the evening, all the inmates were collected, counted and arranged in long rows of 100 each, marked of and divided by stakes and ropes.

Between these lines passed the mates carrying freshly-cooked *chupatees* and *dhâl*, which were distributed under the surveillance of a member of the Committee; none were allowed to rise until all had been served.

At nightfall all were again told off to their proper quarters, where they were required to stay under the charge of their mates until dawn.

All persons receiving relief were obliged to remain within the poor-house limits.

Latrines were erected just in the rear of the enclosures for the convenience of the inmates, and a guard was so posted as to prevent the paupers absconding. One of the greatest difficulties that we experienced was to enforce this rule, and prevent beggars coming in just

at feeding-time, and then making their escape as soon as a convenient opportunity afforded.

Working arrangements (more specially during the hot-weather months) were another great difficulty. Water was hardly procurable except at a considerable distance, and unless the paupers were sent to the tank under charge of a sufficient guard, they would slink away and go begging all over the station, re-appearing only in time for dinner.

The sanitary arrangements (under the Civil Surgeon) were, however, on the whole, remarkably good, as is evinced by the sick returns during the cholera time. There were hardly any cases amongst the large body of paupers collected at Jhansie, who could not be sent adrift all over the country when the disease appeared in the station.

A cart was told off specially to visit the latrines two or even three times a day, and although they were located quite close to the poor-house no ill effects were experienced.

Clothing.—The clothing supplied to paupers were blankets and *dhootees*, many of the latter being manufactured by the paupers themselves within the walls. The blankets were ordinarily distributed at nightfall and collected again in the morning, but old and weakly persons were allowed to retain their blankets during the day.

The blankets were generally returned to store, and given to fresh-comers, but paupers on leaving the poor-house were allowed to retain their *dhootees*.

Food.—The food supplied was principally wheat, gram, and *dhál*, none of the smaller grains being procurable. The rates were those sanctioned by Government.

Paupers were, as a rule, only fed once a day, if we except the parched gram distributed in the morning. Cooking commenced early in the day, and everything was ready for distribution by about 5 P.M. An hour generally sufficed for the meal after all the arrangements had been fully matured.

Children were fed oftener, twice or even four times a day, and milk was added to their *chupatees*. Food for the sick was prepared according to the Civil Surgeon's instructions.

It often appeared advisable to feed up poor wretches that arrived half starved in the poor-house, and these received from two to four chittacks more per diem. They were able to go out sooner in consequence to out-door work.

Food was ordinarily prepared by the paid establishments, assisted by mates; but in some cases dry grain or *atta* was given, but such cases were rare.

In the hospitals the patients were served and tended by their relations or friends, especially allowed admittance for the purpose.

Registers.—The following registers were kept by the darogah :—

1 Store Book.
1 Distribution of bread according to scale.
1 Register for men of different illaquas.
1 Ditto of receipts and disbursements.
1 Ditto of weekly returns.
1 Ditto of daily reports.
1 Ditto of orders issued by Inspecting Member.

Admission.—Probably the greatest difficulty that arose in connection with the poor-house arrangements concerned the admissions.

The principle adopted was to accept *all* applicants, and give them one meal, and then send them off to work, if they were fit for it, or if not, keep them till they were fit and *then* send them off. Consequently, whenever any pauper was declared fit for work by the Civil Surgeon, off he went; but we could not *keep* him on the relief works. If he were a beggar, or preferred starving to working (and so apathetic is the native that such cases do occur), back he came, sooner or later, to the poor-house; and it is impossible to recognize all such truants; nor could we reject them if they came back half-famished after wandering about some days, and so it was that our numbers were unduly swollen.

Jhansie, 1869. Results.

Poor-houses where established.

The localities at which the poor-houses were established were Lullutpore, Bansee, Banpore, Talbehut, Banda. Patna, Gonah, Mehrownee, Jaklone, and Doongra, The most important were the Lullutpore and Talbehut houses, the latter under the superintendence of Mr. Dutton, Customs Patrol, whose benevolent exertions have been warmly acknowledged by Government. The same order that prevailed on the works was observed in the poor-houses. Each was visited every day by a member of the Local Committee of the place where the relief was distributed. As the inmates recovered strength and became fit for labor they were drafted off to some of the relief work in the neighbourhood. Those who were retained as inmates were employed in basket-making and twisting rope. A *dhotee* manufactory was also established, which supplied clothes for the paupers; and 343 girls and 6,895 women were clothed for Rs. 1,000 which the Central Committee sent for that purpose. Besides the above, alms were given to 88,867 travellers: 41,369 persons were fed at Talbehut, and 27,134 at Bansee.

Excellent order maintained.

Alms distributed to travellers.

Precautions taken to save life.

Every precaution was taken that there should be no deaths from starvation. Lullutpore being 1,950 square miles in extent, and possessing only two tehseeldars, it was found necessary to call for aid from other quarters. The Commissioner, Colonel Lloyd, distributed the pergunnahs among Assistant Commissioners, patrols, and tehseeldars, and endeavoured to work through *punchayets* consisting of the putwarees and principal personages in each *hulkah*, or circle. The duties of the *punchayets* were to watch the spread of distress, inform the pergunnah officers, and suggest measures of relief. A great object was to hunt up the respectable classes, Brahmins and others, who would not of their own accord leave villages in search of relief, preferring rather to die. This object could best be attained by winning the co-operation of the village-headmen and offi-

Respectable classes sought for.

cials. It was impossible but that such earnest efforts to save life should be crowned with success. Little reliance can be placed on the return of deaths from starvation, which are computed at only 500, but there is no doubt much mortality was averted, and that not only among the inhabitants of the district, but among immigrants from Gwalior, Duttiah, Tehree, and other native states. In the middle of May these foreign inmates of the poor-house were counted, and it was found that they numbered a daily average of 1,880, or nearly half the total, and that most were travelling to Bhopal, Malwa, and the Nerbudda in search of food.

Effects of the famine mortality.

Agra, 1868-69.

Abstract of System adopted in the Agra Poor-house.

The inmates were divided into three classes, and fed daily on the premises. They were divided into :—

(1) Able-bodied from whom work was taken.
(2) Blind, infirm, and crippled, who were unable to work.
(3) Young children.

Food was given as follows :—

For Class 1—2 chittacks of gram at noon, 12 chittacks of *dhâl*; and bread in the evening.

Class 2—2 chittacks of gram and 10 chittacks of *dhâl*, &c.

Class 3—for those above eight years 7 chittacks, for those below eight years 5 chittacks.

To prevent laziness men received a certain number of yards of cloth to weave, and if the task was not done, the dole of food was diminished.

Applicants were received in the evening, two members of the committee being present.

Those capable of labour were drafted off to gangs.

CENTRALISED AND VILLAGE RELIEF.

Bijnour, 1869.—Statistics of persons relieved.

As regards poor-houses, none were established before February, 1869, when Mr. H. S. Ross opened them at the principal places in district. Mr. Colvin opened three more, and eventually there were seventeen, viz., at Bijnour, Mundawar, Daranuggur, Huldour, Chandpore, Rajpore, Dhampore, Nehtore, Serkote, Seokara, Nugeena

Poor-houses.

Places at which poor-houses were opened.

Afzulgurh, Barrapoora, Kotekhadir, Rehur, Nujeebabad, and Keeruthpore. The numbers supported were—

Details of Relief.

Period.		Gross number.	Daily average.
February,	1869	51,200	1,829
March,	,, ...	193,087	6,229
April,	,, ...	127,910	4,264
May,	,, ...	47,147	1,521
June,	,, ...	44,059	1,468
July,	,, ...	54,261	1,750
August,	,, ...	79,150	2,553
September,	,, ...	65,515	2,184
October,	,, ...	20,698	668
November,	,, ...	12	
303 days.		683,048	2,254

These returns resemble the figures of labour relief. March and April, 1869, were the worst months. The harvest alleviated distress considerably, and the unsteady weather in July and August produced as notable a change for the worse. There is another similarity between the results of the two systems. In both the women and children preponderated. The proportions per cent. were—

Preponderance of women and children both on the works and in the poor-houses.

	Men.	Women.	Children.
On works	25	52½	22½
In poor-houses ..	15	38	47

The women would naturally bring their children with them, but it is to be feared that the excessive number of children in the poor-houses must be attributed to another cause. On this point the opinion of the Commissioner may be quoted :—

Number of children explained by the Commissioner.

"A great majority of the work-people are women and children. Mr. White, who is in charge, told me that great numbers came from villages four *coss* off; that they would not remain in the *choppers*, but came from their homes and returned every day. This of itself, considering the very low rates of pay, is, I think, a sufficient answer to any assertions that more is being done than is necessary to save the people from starvation. The poor-houses, it is true, are occupied by the blind, the aged, and infirm; but these have been driven to our poor-houses because the people are too poor themselves to give their usual dole. If they had not been received many would have died. To see mothers begging for one more *chuppatee*, and the anxious hungry look of the children, shows that certainly too much is not given. * * * Mothers drop their children, and Mr. Ross (the Magistrate) has been obliged to post patrols after payment of wages to pick up any children that have been left. Things must be bad when maternal feeling* ceases."

* The intensity of the suffering is proved by information which has been placed privately at my disposal. The people ate nuts, weeds, and mango-kernels ground into flour, while infants were fed on the mango fruit, of which there chanced to be an abundant crop. It has also been mentioned as a curious fact that, notwithstanding all this misery, on the occurrence of any festival the people would desert the works and rush off to the Ganges to bathe. On one occasion during the month of August, when things looked very bad, out of 3,000 women and girls, 1,000 left the works to attend a fair and amuse themselves with swinging. (*Note by Mr. Hervey.*)

RECOVERY OF CASTE AFTER PARTAKING OF COOKED FOOD AT A POOR-HOUSE.

Cuttack, 1867.—Mr. Kirkwood.

When the closing of operations began in September last, it became a matter for most serious deliberation how this intolerance on the part of the Brahmins should be overcome; for, by regarding those who had partaken of cooked food in our *Unnochutters* as irreclaimable out-castes, they threatened to split up families, separate parents and children, and, in a word, disorganise the whole social system of the province.

The matter was one full of anxiety. There were crowds of women and children daily leaving our *Unnochutters*, but to go where? to go to their homes, there probably to be refused all intercourse with their kindred? In such case it would be no difficult task to cast their horoscope. Their future could be foretold with tolerable certainty; beggary and plundering, every degree of turpitude, and every form of loathsome disease; in brief, a course of life that might go far to undermine the moral and physical well-being of the province for years to come. Such a prospect was not one before which to sit down quietly and contemplate. Many influential resident and non-resident Bengali gentlemen, zemindars, began to agitate for the restoration of caste; but the Central Relief Committee declined to move in the matter, thinking that any interference that might partake of the nature of a policy would not only place Government in a false position, but rather retard than hasten the desired solution of the difficulty. But meanwhile influential natives of Calcutta and Cuttack had consulted the pundits of Pooree, Cuttack, and Calcutta on the subject. The pundits gave their opinions in language as clear as it is decisive. These opinions all set forth that no act committed in order to save life occasions loss of caste; but the Cuttack pundits enjoined the payment of a few annas and the performance of certain ceremonies, not because the *Shastras* so directed, but because they deemed it expedient. The others stated that no penance whatever was necessary. The authoritative ruling thus obtained has been made widely known, and, I believe, with considerable effect, for now I frequently hear of those who have eaten of the cooked food being re-admitted to their castes. As the opinions given by the pundits may be valuable in any future famine, they are quoted in Appendix VI [cited below].

Vyvasthas, or Rescripts of Pooree and Cuttack Pundits.

1*st Question.*—In case any person should have been imprisoned by order of the authorities, and have, whilst in prison, eaten food cooked by persons of lower caste, can he recover caste; and if so, by what penance can his caste be recovered?

Answer from Pooree Pundits.

He can recover caste—

If Brahmin, by performing *Chundra-ain Broto.*

If Kshatrya, by performing *Santopun Broto.*

If Vaisya, by performing *Surro-ratro Broto.*

If Sudra, by performing *Tri-ratro Broto.*

These penances also hold good for people forced to eat impure food.

2*nd Question.*—In case, during the famine, a starving person of any denomination should have partaken (in extreme necessity) of food cooked by persons of lower caste, can he, according to the Shasters, recover caste, and if so, what penance is required?

Answer.—By the Shasters he can recover caste and be absolved from sin.—

If he has eaten defiled food for	5 days,	by the performance of	*Krichchra Broto,*
	for 10 days,	„	*Supto* „
	for 15 „	„	*Parah* „
	for 1 month,	„	*Chundra ain* „
	for 3 months,	„	*Krichchra* „
	for 6 „	„	*Ditto* 6 months.
	for 1 year	„	*Ditto* 1 year.
	more than 1 year,	„	*Ditto* for 12 years.

The above refer to persons who were not in extreme necessity when they ate impure food, but who had some wrong motive in so eating.

3*rd Question.*—If Hindoos, having caste to lose, ate food up to the end of the famine cooked at the *Unnochutters*, without first ascertaining who had cooked or touched such food, or with whom they sat down to eat, can they recover caste, and if so, what penance is required?

Answer from Cuttack Pundits.

They can recover caste by performing penance according to *Manu, Parasara,* and *Yajnyavalka,* whose Shasters are obeyed in Orissa.

Extract from *Manu,* Chapter X, verse 103:—"It is no crime in a man if, in great necessity, and to save his life, he eats impure food."

Extract from *Parasara,* Chapter XI, verses 4-5:—If a Brahmin eats the food of a *Sudra,* or other impure food, without knowing that he does so, or in case of great necessity, he can purify himself by performing *Brahmo Krichchra.*

Extract from *Yagnyavalka,* Chapter III, verse 41:—Same as *Manu* according to the *Prayaschitta Tatwa.* A Brahmin or other person eating the food of a *Chandal* in case of great need, if he be a Brahmin

must perform *Chundra-ain Broto;* if a Kshatrya, *Santopun Broto;* if a *Vaisya,* six night or *Surro-ratro Broto;* if a *Sudra,* three night *Broto.*

The Cuttack Pundits are of opinion that, although *Manu* clearly says that there is no crime whatever in eating impure food in order to save his life, or in time of great need, still, that it is better for the person who has eaten such defiled food to perform some penance in order to escape from the censure of his fellow-men.

In case any person cannot perform the *Chundra-ain Broto,* giving 8 milch cows to the Brahmins, or 8 *kahans* of *cowries* (value Rs. 2), feeding upwards of five Brahmins and the persons of his *somaj,* eating *pancha gubbea* (*i.e.,* a mixture of cow dung, cow urine, milk, *ghee.* and curds), shaving, bathing, and throwing away his old clothes, will do as well.

The above according to *Busto** and *Viswamitra.* In case the person is old, or a woman, or afflicted with some physical ailment, half the above penance will suffice.

In case of a child, one-fourth.

Calcutta Pundits.

1*st Question.*—Whether the famine-stricken people, at the time of a general famine, being unable to maintain their lives, lose caste by eating food in an *Unnochutter,* the food being cooked and distributed by Brahmins?

2*nd Question.*—Whether those who have eaten in the *Unnochutters* opened by Government, with the view of preserving the lives and homesteads of the ryots at the time of a general calamity, lose their caste or not?

3*rd Question.*—What should be the prescribed penance, in case any should be required, for those who have acted thus? Should it be a general one for all, or varying with the caste and status of the individual?

4*th Question.*—What should be the nature of the atonement, should any be deemed necessary, and what would be the probable cost of such ceremony?

5*th Question.*—Can any punishment, according to the Shasters, be legally awarded to those who refuse to take back such of their relatives and friends as desire to be admitted into their former caste, when these have freed themselves from all sin by undergoing the prescribed atonement?

6*th Question.*—If any are declared to have lost caste beyond the possibility of recovery, and consequently to be permanent outcasts, of what caste will they be reckoned?

Answer by the Calcutta Pundits to all these Questions.

At the critical conjuncture of a wide-spread famine, it is not considered in any way sin to eat with a throng of others cooked rice provided by Government or the community at large. This is the declaration of the learned pundits in general.

[* *Sic,* in the printed volume. Query Vishnu?—J. G.]

Proof.—Extract from Manu.

"No one commits or entangles himself in sin who, being reduced to a "morbid condition, takes to eating whatever food he can anywhere "procure. It would be as reasonable to think of attempting to plaster "the sky with mud as to consider such an act on the part of a starving "person a sin. Uzeegarta (a celebrated *rishi* or devotee) did not scruple "to slay his own son in order to appease his hunger; for, committed under "the imperative dictates of hunger, no act is sinful. Pious Vam Deb "(a very pious and celebrated devotee of old) being desirous when in "great want to devour dogs' flesh, did not involve himself in sin. The "religious Bharadwaj Rishi, under the compulsion of excessive hunger, "when wandering through a dense forest in company with his son, "slaughtered many cows and ate of the forbidden flesh, but he did not "involve himself in sin thereby."

"Pious Viswamitra did not involve himself in sin by taking a piece of dog's leg for a meal when very hungry."

Once, in a severe famine, Chuckrun (a celebrated pious devotee), in a reduced morbid state, sought shelter in the house of a family and begged something to eat. Thereupon some rejected and rotten eatables, such as *kullai* and water, that were available in the family, were brought to him. He did not eat the *kullai*, because it was in a decomposed state, but said that he would thankfully have eaten it if it could have saved his life, because anything, no matter whether it be the refuse of another's table, or any other inferior description of food, if it enables a man to preserve life, name, position and intellect, can be eaten without commission of sin. He therefore set aside the *kullai* and drank the impure water (*i. e.*, water rendered impure by other persons having already drunk from the same vessel).*

Signed by

1. Tara Sankar Shurma of Hatitearri.
2. Birja Nath Shurma of Nuddea.
3. Hari Narayan Deb Shurma.
4. Thakur Dass Shurma.
5. Rakhal Dass Shurma of Sunkerpore.
6. Godadhur Shurma of Gooptepara.
7. Mohesh Shurma.
8. Tara Sunkar Shurma.
9. Tarak Nath Shurma.
10. Mohendro Nath Shurma.
11. Raj Kumar Shurma.
12. Prem Chundra Shurma of Bodreshur.
13. Srinath Shurma of Tehapore.

[The latter part of the section is given in the original as an extract from Manu, but is not to be found there. It may be have been taken from some Upanishad.—J. G.]

[*Note.*—Sir Wm. Jones' translation of the above passage in Manu is as follows:—Chapter X. *On the mixed classes* [*castes*] *and on times of distress.*

Verse 104.—"He who receives food, when his life could not otherwise be sustained, from any man whatever, is no more tainted by sin, than the subtle ether by mud.

Verse 105.—"AJIGARTA, dying with hunger, was going to destroy his own son (*named* SUNAH-SEPHA) *by selling him for some cattle*, yet he was guilty of no crime, since he only sought a remedy against famishing.

Verse 106.—"VAMADEVA, who well knew right and wrong, was by no means rendered impure, though desirous, when oppressed *with hunger*, of eating the flesh of dogs for the preservation of his life.

Verse 107.—"BHARADWAJA, eminent in devotion, when he and his son were almost starved in a dreary forest, accepted several cows from the carpenter VRIDHU.

Verse 108.—"VISWAMITRA, too, than whom none better knew the distinctions between virtue and vice, resolved, when he was perishing with hunger, to eat the haunch of a dog, which he had received from a *Chandala*."—J.G.]

Madras, 1824 (Guntoor Famine).—From letter to Sir Thomas Munro, Governor of Madras, cited by Mr. Dalyell, Appendix XVII.

MEMORANDUM REGARDING RELIEF HOUSES AT MONEGAR, ESTABLISHED IN 1824.

The following calculations are formed upon the supposition that the number of persons to be supplied with food daily amounts to 2,000.

A pandall should be erected of the following dimensions,—80 feet long :

20 feet broad.	20 feet. Godown for firewood.	20 feet. Godown for utensils.	Space allotted for grinding and beating the grain.	10 feet.
	40 feet. Cooking apartment.		40 feet. Space for cooling the congee.	10 feet.

The pandall may be built of palmyras, enclosed with bamboo mat; the roof to be thatched with palmyra-leaves, and the whole put together simply with ropes and string, so that the principal materials may not suffer injury, but be taken down hereafter and sold. It is estimated to cost Rs. 175.

The following is a list of utensils, &c., as the outlay that will be required for the use of pandall:—

		Rs.	A.	P.
15	Grinding stones, at Rs. 1½ each	22	8	0
5	Stone mortars and pestles...	16	8	0
5	Beer casks to be cut in halves, for cooling and distributing the congee	10	0	0
13	Tin pots to contain half a gallon or two quarts each ...	2	8	0
12	Tin quarts	1	8	0
20	Bamboo sifters (moruns) and 20 large common mats ...	5	0	0
30	Common cocoanut-shell ladles	0	4	0
100	Straw stands (peroomany) for pots to rest on	1	0	0
2,000	Tickets for the people that receive food ... } 1,000 Ditto for the people able to work ... }	35	0	0
	Total ...	94	4	0
	Say Rs. ...	100	0	0

Most of the above articles may be sold after charity ceases.

MONTHLY ESTABLISHMENT.

	Rs.	A.	P.
2 Connicopolies, at 2½ pagodas each	17	8	0
8 Coolies for grinding, sifting, cooking, and distributing the food, seven at Rs. 6 each, and a head cooly at Rs. 7 ...	49	0	0
Firewood, Rs. 5 per day	150	0	0
Pots, chatties, &c. (Note.—These will constitute a regular monthly charge, as a pot for boiling the food will not last, on an average, more than 15 days before it cracks	20	0	0
Salt, chillies, oil, brooms, &c., &c....	13	8	0
Total ...	250	0	0

Two police peons will also be required, and four police talliars.

It is proposed that the food to be distributed among the people should consist of one part of rice and two parts of natcheney. This should be mixed together and boiled into *very thick congee.*

The quantity of congee that should be given to the people, should be half a gallon, or two quarts each to adults and two chillies, and a quart each to children. This is quite sufficient for one meal a day.

The time appointed for the distribution of the food should be at 6 o'clock in the morning.

During the day the coolies should be employed in beating, sifting, and grinding the natcheney and washing the rice; the grain should then be fixed in the proportions above specified; and the boiling commence at 4 in the afternoon.

Hundred pots of 1 foot 6 inches in diameter will be sufficient to boil congee for 2,000 people.

A pot will require to be boiled about one hour. Thirty pots may be boiled at the same time, then thirty more, and so on till the whole of the food is prepared; the cooking will be concluded at 8 or 9 o'clock in the evening.

The congee may remain in the pots in which it was boiled till the next morning, when it will be required to be served out among the people. Tubs should then be placed at convenient distances, the people first being made to sit down in regular lines, the tubs be filled with congee, and the distribution be made in the proportion before laid down.

If the establishment be found inadequate to serve the people in a reasonable time, assistance might be obtained from the people applying for relief.

Two kinds of tickets should be printed on cards or on pasteboard: one, for the recipients of the bounty of Government in food; the other for the people who are able to work. The following forms for the tickets are proposed for those who require food.

"Government Charity."

"Royapoorum" (or Perambore, &c.) as the case may be.

For those who are able to work—

"Able to work"—"From Royapoorum" (or as above.)

The talliar will discriminate between the up-country and the Madras people, and those of the former who are considered able to work, will be sent with a ticket to such places as the Government may be pleased to appoint for them to labour.

The people who arereally necesstous and unable to toil and manual laboru, will receive a ticket, which will entitle them to food daily. Tickets should be given to all such applicants, and when they

afterwards appear, the ticket should be received from each one, as soon as the food has been given; and when the whole number assembled has been supplied, the tickets are to be restored to them. This measure will prevent any one applicant being twice served, and also be a check against imposition.

The estimated expense of feeding the poor on the foregoing scale, eckoning the natcheney at 4 marcals, and the rice at 3½ marcals per ragoda, and taking into account the regular monthly establishment amounting to Rs. 250, will be about Rs. 67 for 2,000 persons per day, or Rs. 2,000 per month, thus producing the average of one rupee per month for each person receiving one full and sufficient meal per diem.

The above calculations have not been formed upon supposition, but are the results for actual experiments.

If the business of the outlay and establishment is to be managed by the Superintendents at Royapoorum, they will require advance of Rs. 500 to enable them to erect and furnish the pandall and engage the requisite servants, and an order on the Superintendent of the Monegar Choultry to supply them with grain for 15 days each time. The quantity for that period will 600 marcals of natcheney and 300 of rice. The Superintendents of course engage to render a detailed account of their disbursements, and to refund any money that may eventually remain in their hands.

The pandall can be completed in three days after the advance is made.

MEDICAL ARRANGEMENTS.

MEDICAL ARRANGEMENTS.

Moradabad, 1860-61.—Mr. John Strachey, Collector.

23. *Conservancy.*—The difficulty is great of carrying out proper measures of conservancy in an Indian poor-house, when the number of paupers is large. In this respect everything has been done that was possible. The necessary establishment of sweepers has been maintained, and all practicable care has been taken for the removal of filth and for the prevention of disease. The paupers received clothing whenever it appeared necessary. This point is one of much importance on sanitary grounds, and the destruction of the filthy rags, in which the paupers are clothed on their admission into the poor-house, must often, for the same reasons, be insisted on. The sanitary state of the inmates has, upon the whole, been good. The following table shows the number of deaths in the poor-houses from 1st Feburary to 31st May. Taking into consideration the circumstances under which the majority of the paupers were admitted, and the condition in which they generally entered the poor-house, the results are satisfactory :—

Month.	Number of deaths in poor-house.	Average daily number of inmates of poor-house.
February	17	475
March	73	1,479
April	65	2,797
May	61	4,217

24. *Hospital and Dispensary.*—Separate sheds have been set aside for the Hospital and Dispensary, and the necessary establishment has been maintained for their supervision. But this department of the poor-house has not been managed in a way that can be called altogether satisfactory. There was no Civil Surgeon at Moradabad when the poor-house was established, and it is only lately that it has obtained the benefit of European supervision.

Ganjam, 1866. From Lord Napier's Minute.

12. For the benefit of all classes, it was urgently necessary to provide additional medical superintendence, a commensurate supply of medicines, and some simple hospital buildings, in which the dying might find a refuge, and the diseased have some chance of recovery. The Collector had already turned his attention to this subject before my arrival. I was accompanied by Acting Deputy Inspector-General Porteous, and by Mr. Ross, an intelligent apothecary. Dr. Porteous gave

impulse and direction to the work. Six hospitals were set on foot. At Ganjam one of the deserted habitations of the old mercantile body was secured. At Rumbah the offices attached to a large house belonging to the Aska Sugar Company were converted to the same purpose. At Russelcondah a temporary shed will shortly be replaced by the repair of an old building, formerly used by a local militia force. At Berhampore, Chetterpore, and Aska, cheap structures have been erected, with bamboo supports, wattle walls plastered with mud, thatched roofs, and clay floors. Provision has been made for the separation of the sexes, and of contagious disorders. These constructions are far from satisfactory; but time pressed, and means were limited. The patients will each have a bedstead, a mat, and a blanket; they will receive diet in some measure appropriate to their cases; and they will have some share of professional advice. The attendance and the treatment will certainly be imperfect; but the habits of the people are simple, their wants are few, and their maladies, as I am assured, are more susceptible of cure by rest, shelter, and sufficient food, than by physic. The six hospitals will afford, if necessary, room for between 400 and 500 patients. They have been built and furnished from an appropriation made by Government, and they are supported from the Charitable Relief Fund and from Government contributions. At Russelcondah, Berhampore, and Chetterpore, the medical officers attached to those stations have afforded their gratuitous assistance. Mr. Ross is stationed at Rumbah. For Ganjam, a dresser was procured from Waltair; and at Aska, a retired apothecary, in the service of Mr. Minchin, has, by the kind permission of his representative, been retained with a small addition to his salary and pension.

Cuttack, 1867.—Mr. Kirkwood's Report.

Relief hospital.

It has been already stated that a hospital will have to be an invariable annex to every relief village. It should be situated apart from all other buildings, and should consist of two separate sheds, about 40 feet long by 30 broad, one for males and the other for females. The greatest care should be taken to secure the thorough ventilation of the hospital. Wooden beds only so high as to admit of the air circulating between them and the floor, or a long platform made of wood or bamboos, should be provided for the sick to lie upon. Blankets and clothing should be given out, and should be frequently washed and purified. Every morning, when the sun is not powerful, all the sick, except in such cases as any movement may injuriously affect, should be moved out of the building for an airing. This injunction should be most strictly attended to; its healthy and cleansing influence on the patients will be found most noticeable. Round the hospital a small yard should be enclosed, into which none but patients and the hospital attendants should be admitted, and within which the patients should take their airing.

Every effort should be made, both by continual change of clothing and by cleansing the bodies of the sick, to keep the air as pure as possible; it is needless to say that such a course must have a most important bearing on the health of the patients.

The system of conservancy adopted in connection with the hospitals has been that of digging long trenches, into which the people had to defœcate; earth was placed near at hand and thrown over the excreta; a fresh pit should be dug every day, the old one being carefully filled in by the sweepers. This plan has been found easy and efficacious.

Scale of establishment.

The establishment required for a hospital will be one dresser, Rs. 10; one cook, Rs. 6; one waterman, Rs. 5; two or more sweepers, according to the number of the patients, on Rs. 5 each; one dhoby or washerman on Rs. 6; one peon on Rs. 6.

Scale of diet.

In all cases the food given in the hospitals will have to be given cooked. Where Government imports grain the grain should be given out by the darogah in charge of the relief golah, otherwise the darogah should purchase it, and serve it out to the person in charge of the hospital. All expenditure other than grain incurred in feeding the hospital patients should be met by the native doctor of the circle from a sum of money advanced to him for the purpose. The cooking for the hospital should be entirely distinct and separate from all other cooking operations. A *dooli* should be kept at every hospital for the use of the patients when required or for the purpose of bringing in patients from a distance. In the case of a large town, several of these with a regular establishment of bearers will have to be maintained.

Medical staff, supervising and subordinate.

During the year 1867 the hospital arrangements were organized in the following manner:—

To each district was attached an Assistant or Sub-Assistant Surgeon. He was in charge of the medical portion of the famine operations, corresponding directly with the Relief Manager of the district, and being so far under him that in all but professional matters he was expected to act in accordance with the Relief Manager's wishes. Under him were all the hospitals of the district, and for their efficient superintendence he was provided with a staff of competent Native Doctors on Rs. 25 to 30 each per mensem. Each of the Native Doctors was placed in charge of a circle of some six hospitals, for the proper management of which he was responsible. The Native Doctors were provided with funds for the purchase of whatever was necessary for the hospitals; and European medicines, surgical instruments, &c., were issued out to them by the District Medical Officer. They had to tender every month an account of receipt and expenditure to the Medical Officer, who passed or made such alteration in the charges as he thought fit, and, having done so, forwarded the bills to the district Relief Manager. Hospital returns had to be submitted monthly by the Native Doctors to the Medical Officer in the following form:—(1) month; (2) No. remaining at end of last month; (3) admitted; (4) total; (5) discharged cured; (6) discharged died; (7) results unknown, as run away, &c; (8) total discharged; (9) remaining on last day of month; (10) remarks. The Medical Officer then compiled a return for the district, and forwarded it to the District Relief Manager, who in his turn submitted it to the Special Famine Commissioner.

All subordinate medical establishments (*i.e.*, every one employed on hospital duty below the rank of the Native Doctor) were paid from the Relief Funds, and their names included by the Darogah of the relief centre in his monthly salary bill. The Native Doctors and Medical Officer were paid by Government. The Native Doctors had no power to dismiss their subordinates. They could report either to the Relief Manager or the Medical Officer. In other than exceptional cases the Medical Officer did not himself dismiss or appoint the subordinates in his department, but submitted a recommendation to the Relief Manager, which was invariably acted on; the Relief Manager was in this way made cognizant of the circumstances, and all confusion in the passing of the monthly pay bills was obviated. The Medical Officer was expected to be constantly on the move, inspecting the hospitals under him, and to ensure this was required to furnish the Relief Manager with a fortnightly diary in duplicate, of which one copy had to be forwarded by the Relief Manager to the Special Commissioner with any remarks he may wish to make. The above arrangements were found to work well and harmoniously.

DISEASE DURING FAMINE.

DISEASE DURING FAMINE.

N.-W. P., 1860-61.—Dr. Cutcliffe and Colonel Baird Smith.

[Colonel Baird Smith, Part I, para. 28.] The general condition of the population of the very bad districts, however, may be judged of from the following description by Dr. Cutcliffe, Civil Surgeon, of those received into the hospital of the Meerut relief house. In speaking of their personal state, he says—"They were one and all starving, and the majority were skeletons from atrophy." This was not an hospital for sick only, but for starving people attacked by disease.

"That famine has been prevailing in the district is a fact patent to all. The people, sore-pressed for want of natural aliment, endeavoured to support life by eating wild fruits and vegetables procurable at the expense of toil in gathering them. They had suffered not only from simple deficiency of food, but from deficiency of digestible material, from having eaten as substitutes for proper nutriment vegetables and substances acting injuriously upon them.

"But they were not only ill-nourished and poor-blooded; they were also suffering from great nervous depression, both before and after admission into hospital; *before* from social calamities, loss of home, of relatives, and of friends, from the dark prospects of the future and the disseverance from the ties of village life (ever dear and deep-rooted in the mind of the rustic), with its freedom and petty independence; and *after*, from the conviction of their being enclosed in a poor-house surrounded by suffering in every form to-day, perhaps witnessing the death of a child, and expecting to-morrow that of their wives, and only hoping that their own might soon follow. From the first to the present time the great mental depression of the sick in hospital has been most remarkable, and many instances have occurred of men who refused to take food on the plea that they did not desire to live, either because their villages had been in part deserted, and their families scattered, or that they had lost their children or nearest relations, or sustained in some way or other some severe trial of the affections, and had succumbed to despair. Many had wandered about the country after leaving their villages, and had been exposed to the vicissitudes of the climate, fainting under the heat of the sun by day and shivering from the cold by night, from which indeed they were ill-protected. Many people thus found were sent into hospital by the Police, and some in the last stages of disease arrived only to die. From the

mortuary abstract of February we found out of 162 deaths in that month—

"28 died on the first day of admission.
28 died on the second day of admission.
27 died on the third day of admission.
19 died on the fourth day of admission.
60 survived over the fourth day, and were affected by, and died subsequently of, chronic diarrhœa, dysentery, and lepra.

"From the Abstract of March—

37 died the day of admission.
57 died one day after admission.
80 died two days after admission.
23 died three days after admission.
26 died four days after admission.
41 died five days after admission.
69 died six days after admission.

"Being a total of 333 died within six days of admission, or about three-fourths of the whole deaths of this month." The total number from January to March was 630; of discharged cured 4,249, with 694 more remaining in hospital.

These are very mournful details, but in the present instance they are somewhat lightened by the thought that deplorable though the mortality has been, yet that twice as many have been recovered from the terrible condition in which they were found than have sunk under it. The most piteous effect of the case seems to me, however, to be in its suggestiveness. This is a sample brought into light of these sufferings, which in many communities are carefully concealed, and which are endured even unto death sooner than that compromise of caste or tribal feelings can be tolerated. At present then it seems vain to attempt to arrive at the true general mortality. That it has been great no one can doubt who has gone, as it has been my duty to do, from district to district, and has seen the abject wretchedness to which the people of the bad sections were reduced. Long before I read the Medical Report just quoted from, the aspect of deep depression common to all the real sufferers by the famine had struck me everywhere. I am familiar of course with the bearing of natives generally under suffering, and know them to be often easily borne down by it; but I have never before seen such an aspect of desolate despair as many of these men presented, all of whom, till this great calamity struck them down, had evidently been able to support themselves and their families by honest and independent toil in husbandry or otherwise. Hereafter, when it is possible to examine carefully into village records, a general statement approaching the truth may possibly be prepared, but just now that is impossible.

Note by Compiler.—It will be seen from the above that Dr. Cutcliffe and Colonel Baird Smith, both excellent observers, were deeply impressed with hte effects of moral depression on the health of the population. In striking contrast with these observations is the following extraordinary statement put forward by Dr. Lyons (p. 182) in support of his theory about under-feeding as the cause of epidemic fever. After examining the following circumstances affecting the rate of mortality—(1) times and seasons; (2) sex; (3) nge; (4) station in life; (5) recent residence in a locality affected

ORISSA, 1866.—ENQUIRY COMMISSIONERS, PART I.

75. We think it quite impossible to distinguish between the mortality directly caused by starvation and that due to disease, directly or indirectly connected with starvation, want, and bad food. Not only do our remarks regarding the want of statistics apply to this subject also, but in truth want and disease run so much into one another that no statistics and no observations would suffice to draw an accurate line. The death of the emaciated and exhausted from cold, exposure and bowel diseases, either before receiving or upon receiving food (the last is a very common form), may, in fact, be considered the direct result of starvation. The principal disease of a destructive character, in respect to which it is often impossible to say whether it has been caused by want, is cholera. We believe we are correct in saying that, even where there is no epidemic cholera very generally spread, it has constantly happened that the famine-stricken have been carried off by that disease or by something presenting similar appearances. It is also certain that, independent of famine, cholera prevails in Orissa in the early part of almost every year. The Juggernath Temple seems to be a focus from which it constantly spreads. And, in the early part of the famine, it was undoubtedly difficult to distinguish between two causes of death—cholera and starvation—which in fact we find in the early reports to be generally coupled together. The truth we take to be simply this, that the ordinary outbursts of cholera were aggravated and extended by want and bad food. The first effect of the scarcity, universally, was to drive the people to subsist on unusual and unwholesome food, jungle roots, and such like, and we find that cholera constantly accompanied want. We have it first in the districts of Southern Pooree, where excessive want first appeared; then about Pooree itself and Gope; and later in the eastern portions of Cuttack. At Balasore also it appeared at the same time as starvation. It depended very much on the idiosyncrasy of the narrator whether the mortality was ascribed to cholera or to want, or to both; and as in ordinary times cholera is sometimes called by milder names, so starvation may sometimes have passed for cholera. The presence of cholera seems at any rate to have had a material effect in rendering less palpable and undeniable the whole effect of want in the early stages of the famine, but was certainly to a great degree the result of want. *We have heard comparatively little of fever during our enquiry.**

76. Cholera is, of course, more impartial in its blows than simple want, making less distinction between rich and poor, and where the

(6) previous habits; (7) humidity of soil; (8) constitution; (9) influence of previous disease; (10) station in life; (11) fatigue,—Dr. Lyons proceeds to examine MENTAL DEPRESSION as follows.—"It is usual to attribute to this cause a share in producing the great mortality in prisons from relapsing fever and other diseases. But I have very great doubts on the subject, or at any rate as to whether mental depression is so universally and strongly felt by prisoners as to reduce their chances of recovery. I believe if wholesome sanitary conditions are rigidly maintained in prisons, *the influence of mental depression might be left out of account altogether*, and it will not appreciably affect the state of health or the rate of mortality among prisoners. I have formed this conclusion after some years of observation made on prisoners derived from all ranks of native society. *A certain amount of civilization or individual refinement appears to be necessary before mental emotions become capable of exercising an appreciable influence over the physical nature.*"

[* The testimony (which I have thus italicised) militates against those who have ascribed the Burdwan and other epidemic fevers principally to under-feeding.—J. G.]

want among the poor had aggravated the epidemic into a great intensity, the classes a degree better off also on many occasions suffered severely from the disease, especially those in what may be called a state of semi-want,—the poor ryots who did not starve but whose food was rendered unusually scanty and poor. But in other respects the testimony is universal that the calamity of the famine fell with by far the greatest severity on the workers for wages, the agricultural laborers, coolies, and small artizans; especially, among the latter, on the weavers, already plying a declining trade.

Cuttack District, 1866.—Enquiry Commissioners.

72. In the way of medical assistance all was done which was possible with the means at the disposal of the local officers. It cannot be said that the medical staff was by any means sufficient; but looking at the circumstances of Bengal, we doubt whether it would have been possible to meet so sudden a demand for such a number of native doctors as would have been able to render medical assistance accessible to the bulk of the distressed population. More than one of the native medical men died during the famine. At Cuttack a special charity hospital and a small-pox hospital were established, and measures taken to ensure the removal to them of sick paupers. The number in hospital was generally about one hundred. These hospitals were superintended by the Civil Surgeon. At the two sub-divisional head-quarters —Jajpore and Kendraparah—hospitals also existed; and special hospitals were established at twelve of the relief centres. The Civil Surgeon has written—"Ordinary sickness is always unusually prevalent during "famine, and to this has been superadded cholera. As regards "dysentery, which has been by far the more fatal disease, I consider "it to have been almost entirely due to starvation. The people have "also been infested with intestinal parasites, giving rise to various and "complicated forms of disease; and though the inhabitants of Orissa are "at all times more or less obnoxious to this affection, the mortality "from this cause is almost entirely attributable to the want of proper "food, and to the consumption of improper articles of food, such as raw "grain, unripe and unwholesome fruits and vegetables by half starved "persons."

Pooree, 1866.

From H. C. B. C. Raban, Esq., Officiating Collector to the Commissioner of Cuttack (No. 297, dated the 15th June 1867).

With reference to your letter No. 164 of the 31st ultimo, enclosing a copy of letter No. 904M of the 13th ultimo from the Secretary to the Board of Revenue to your address, I have the honor to submit the statistics of actual mortality in this district caused by the famine. I hope to forward the complete report on the loss of crops in ten days from this time.

5. The printed forms alluded to contained two columns, distinguishing between "deaths from famine" and "deaths resulting from

disease induced by famine." The two causes are so closely connected together, that it would be very difficult, in the great majority of cases, to decide whether a particular person had died from famine or from some disease induced by famine. Further, there are many cases of disease which, whether the result might otherwise have been fatal or not, are so modified by the want of proper food, clothes, and comforts, that it would be impossible to separate the effects of specific disease from those of famines. Many ailments, ordinarily trifling, become fatal at such times, the whole course and symptoms of others are changed: the fatal result of some cases is accelerated; and it is impossible to define the victims of a famine extending over many months with the precision to be attained in a list of killed and wounded after a general engagement. There is no doubt that even the small-pox was largely propagated by the herding together of the houseless poor, who roamed over the country in search of food, and that its fatal effects were aggravated by the condition of those attacked. It is hardly too much to say that there were very few deaths last year which were not more or less connected with the famine.

6. I attach very little importance to the attempt at discriminating between the two classes of deaths. The great discrepancies in the classification in neighbouring villages which are quite irreducible to any rule, show that those who filled up the papers had no very clear idea of the principle on which to classify the deaths. But I believe the sum of two columns gives, with considerable accuracy, the total mortality ascertained to have occurred among the inhabitants of the different villages. No account was kept of the houseless wanderers who laid down by the roadside to die, and for the bulk of them we must look to the column which gives the number of those who have left their villages or emigrated. The only practical course was to ask at each village the number of those who were known to have died. It is to be remarked that the sum of the ascertained deaths in the district, and of the number of those who wandered away from home, accounts very nearly for the difference between the present population and the population before the famine. If we knew what was the annual death-rate of the district prior to 1865, we might by a deduction on that account obtain a fair measure of the effects of the famine on the mortality. But so little is known of the statistics of rural life in India, that I doubt whether even in Calcutta materials could be found for making the deduction. The only approximate data I can find are from a consideration of last year's mortality in those parts of the district where it was least. The famine was scarcely felt in the little zillah of Huldia, and the returned mortality (clearly the total mortality) was 4·49 per cent. This appears very small, and perhaps the smallness of the zillah, which contained in 1865 only 2,221 people, renders unreliable any average calculated on its population. Next comes the zillah of Khoordah with 27,209 inhabitants. Here the famine was very slightly felt, and the total mortality was 9·23 per cent. We may very safely assume that the average annual mortality must have been considerably less than this, especially as in Manikogorah and Kotedesh, where some classes suffered severely, the mortality was only 13·90 and 14·95 respectively.

Cuttack, 1867.—Mr. Kirkwood.

108. In connection with the consideration of efficient measures for the treatment of the sick naturally occurs an inquiry into the diseases induced by famine and their treatment. The opinions of Colonel Baird Smith, the Famine Commission of 1866, and the medical officers connected with the famine work in the Cuttack district during the year 1867, are given in Appendix 5. It will suffice here to state that it appears that diarrhœa and dysentery of a most severe type are the diseases most generally prevalent in a time of famine, and that these diseases are brought on not only by deficiency of food, but by the bad quality of the food to which recourse is had in order to keep off starvation.

Diseases incident on famine.

Fever is also common ; exposure to the heat of the sun by day and the cold by night, to rain and damp, acting as it does on already enfeebled constitutions, has been found a frightful cause of disease and death.

It has also been found that during the height of a famine the majority of cases seeking refuge in the hospitals are so diseased and emaciated that death ensues within the first few days after admission.

Colonel Baird Smith notices prominently the despair and despondency of those in the hospitals. I have everywhere noticed the same during the late famine.

Most prominently also must be noticed the "intestinal parasites" alluded to by the Civil Surgeon of Cuttack in a quotation from a report of his, to which the Commission of 1866 refer in the extract given in Appendix 5.

Among the less terrible diseases, ulcers and itch have in the late famine been extremely prevalent.

Lunacy and Blindness.

(Bareilly, 1869.—Dr. Corbyn cited in Mr. Henvey's Memoir.)

Some interesting particulars regarding the physical effects of famine have been noted by Dr. Corbyn, late Civil Surgeon of Bareilly, who superintended the city poor-house and relief of nearly 50,000 poor persons between January and October, 1869. He observed that two common results of prolonged starvation were lunacy and ulceration of the cornea, which latter, if not promptly arrested, ended in blindness. During the first ten months of 1869, 70 men, 34 women, and 20 children, the latter all orphans or deserted by their parents, were admitted into the Bareilly Asylum for the Insane, and upwards of 100 persons totally or partially blind sought support in the poor-houses. It is satisfactory to know that the twenty lunatic children received the most tender care at the hands of the European Matron of the Asylum, and are now, in the case of those whose sanity has been restored, being trained as professional nurses.

Lunacy and blindness.

Treatment of lunatic children.

Paralysis said to be produced by Kessaree Dal.

To the above account it may be added that the population of Barah, which adjoins Khyragurh on the west, suffer from paralysis, occasioned,

it is said,* by eating a poisonous grain called *kesaree dâl*. This terrible malady, though not of course peculiar to a season of famine, was a serious aggravation of the poverty and distress that prevailed in these tracts.

Rajpootana, 1869.

Dr. Lyons, at page 237 of his volume on RELAPSING OR FAMINE FEVER (King and Co., 1872) in the chapter on Etiology, writes:—

"But though the foregoing facts strongly indicate the intimate association of destitution or the deficiency of food with relapsing fever, there is apparently some evidence of the existence of destitution unattended by the appearance of the disease. Dr. W. J. Moore, Medical Officer of the Rajpootana Agency, in contesting Dr. Lyons' view, and maintaining that malaria, not destitution, is the principal cause of fever, states that "during the famine of Rajpootana in 1869, there was no epidemic of fever. It is not improbable that the measures of relief carried out had the effect of preventing the degree of want necessary for the generation of the disease."†

Marwar, 1869.—Col. Brooke. (Agency Administration Report for 1869-70.)

11. It has been before remarked that no rain fell at Jodhpore till September 9th. Situated on the line where the flat and fertile plains of Marwar change to sandy desert, Jodhpore, according to the late Colonel Malcolm, who was Political Agent for several years, has an annual rain-fall of not more than four inches. The inhabitants obtain their supply of water for domestic purposes partly from a few very deep wells outside the city, but chiefly from what falls on the rocky plateau around, which is conducted by aqueducts into large reservoirs in the city. In 1868 not a drop of water entered these reservoirs, and during the rains of 1869 only two falls occurred, each of about an hour's duration, and both within 24 hours of one another. The water-supply of Jodhpore, which contains a population of about 100,000 souls, is a question of great difficulty. The numerical paucity of the wells and their great depth make the drawing of a sufficiency a most laborious undertaking to the women. With the mass bathing is out of the question. As in the desert, a sand bath suffices.

12. The devastation caused by the locusts and the destruction of a second year's harvest was followed by yet another visitation, which, though not so dreaded, was far more destructive to human life than either the cholera or starvation. On the cessation of the rains a terrible fever struck down the entire population. It so prostrated the people, that grain spared by locusts, could with difficulty be housed; and

* Mr. Halsey, C.S., in a report on the settlement of Cawnpore district, speaks of loin palsy produced by this coarse pulse among the poorer classes in the southern pergunnahs of that district. The same opinion is to be met with among natives in other parts of India. The botanical name for *khesari* is *lathyrus satirus*.—J. G.

† [*Note by Compiler.*—Dr. Lyons at the time of writing the above had evidently not met with the statistics of the Rajpootana famine mortality. In recent contributions to the *Medical Gazette* he has endeavoured to make out that the epidemic fever described by Dr. Moore as malarious was relapsing or famine fever. In this volume I reprint copiously from the Rajpootana reports (which are not readily accessible) everything that bears on the etiology of the fever, because Rajpootana from its extreme dryness thus strongly contrasting with Burdwan, affords good scope for examining various theories propounded as to epidemic fever.—J. G.

advantage could not be taken of the favourable season to sow the rubbee harvest in good time. All the weak and sickly, the old men and half-starved children, debilitated by famine, were early carried off. The strong and well-to-do only remained. In some cases half the population died of fever. This was the case especially along the banks of rivers, whilst the inland deserts enjoyed a comparative immunity from the scourge; but as the bulk of the population live in the most fertile lands, which are along the course of streams, the deaths by fever alone may be put down at 20 per cent. of the entire population.

Rajputana, 1869.—Colonel Brooke's Report.

Epidemic fever of 1869.

85. Following famine, cholera, and locusts, came another visitation still more fatal to human life than any of the others. A terrible fever struck down the entire population. It so prostrated the people that grain spared by the locusts could with difficulty be housed, and advantage could not be taken of the favorable season to sow the rubbee harvest in time. All the weak and sickly, the old men and half-starved children, debilitated by famine, were early carried off. In some cases, especially along the bank of streams, half the population died of fever, whilst the inland deserts enjoyed a comparative immunity. The bulk of the population, however, live near the course of streams, and hence the mortality was very great. The deaths by fever alone may be put down at 20 per cent. of the entire population. It was feared at first that it might be relapsing fever, spreading amongst a population debilitated by want of food, but Dr. Mooree, the able medical officer in medical charge of the Rajpootana Agency, informs me, after enquiring from all the medical officers in Rajpootana, that the type of the fever was always malarious, never relapsing.

Loss of population in Mawar caused by the famine.

86. Mullanee, a desert tract, suffered less from fever than the rest of Marwar. An accurate account has lately been taken of the population of 81 villages in Mullanee, and enquiries made for the purpose of a census. The mortality in these villages will help us to form some idea of the great loss of population by the famine throughout Marwar :—

Loss of population caused by the famine in 81 *villages in Mullanee.*

		Number of inhabitants before famine.	Number that emigrated and died.				Present number of population.
			Loss by emigration and natural deaths.	Deaths by cholera.	Deaths by fever.	Total loss by famine.	
1	Balmere...	5,047	190	115	111	416	4,631
31	Villages of Balmere	13,623	1,514	243	481	2,235	11,493
1	Bissallah	2,002	180	.....	118	298	1,714
11	Villages of Bissallah	3,722	460	24	117	761	3,061
1	Sindree	4,730	1,197	118	519	1,834	2,896
36	Villages of Sindree	13,883	3,048	305	910	4,263	9,620
81	GRAND TOTAL ...	43,007	6,589	805	2,316	9,907	33,420

The loss in Mullanee was consequently about one-fourth of the population, the number before the famine having been 43,007, and after it 33,420. The difference between the loss by fever in the interior desert villages of Balmere and Bissallah, and by the same disease at Sindree, on the bank of the Loony River, is very marked. In the former, the deaths by fever were only one-fortieth of the population, in the latter, one-sixth. The total loss by fever was much less in Mullanee than in the richer districts of Marwar, where it was in many cases as high as one-third. If we take, however, the same rates for loss by emigration for the whole country which the Mullanee returns exhibit, and increase the loss by fever and cholera (which also was much less severe in Mullanee), we shall have a decrease of the population for the year amounting to about 480,000 souls, or nearly one-third of the population :—

Loss by emigration, 15 per cent. of total population ..	225,000
„ cholera, 15 per cent. of those left in country ..	75,000
„ fever, 15 per cent. of population after the famine	180,000
Total loss ..	480,000

Mortality amongst emigrants.

87. It is impossible to say how many of the emigrants died from disease or starvation, and how many settled in the countries to which they went. It must be recollected, too, that many have again emigrated in consequence of the destruction of their fields by locusts; a great number of the non-agricultural emigrants, especially the artizan class, have found employment elsewhere and will not return. From the information I have sought, and from my own perceptions from what I have heard and seen, I should say that 150,000 must have died, either from actual starvation or from the exhausted state of the system brought on by insufficient and unwholesome food, and that 75,000 have settled in other countries.

Loss of population in Rajpootana caused by the famine.

88. If we extend the estimate over the other districts visited by the fever and cholera, which was co-equal in extent with the famine, we shall have a frightful mortality not directly by famine, but resulting from famine. The area of the fever tract, excluding Marwar and Bickaneer, may be taken from the Sambhur Lake in the north to Oodeypore, and from the Aravalli to the Chumbul. This includes some of the most fertile parts of Rajpootana, and contains an area of 27,500 square miles, with a population of 200 to the square mile, or 5½ millions of souls; and if over this area we calculate the loss from all causes during 1869 at the very moderate estimate of 15 per cent. of the population, including deaths from cholera, scarcity, and fever (though the mortality may probably reach 25 per cent.), we shall have a mortality of 825,000 during the year in these districts alone. I have taken this rate, as it is the mortality reported for Ajmere to Captain Repton, Deputy Commissioner of Ajmere, by the District officials, though it is notorious that

these men omit the record of very many deaths.* At Todgurh, in Mhairwarra, the mortality is almost as high as in Marwar, or 1 in 3½.

Tehseeldar's Annual Reports of cultivators, cattle, and general population.

	Cultivators.					Cattle.			General population.				
	Before famine.	Died.	Emigrated.	Total decrease.	Remaining.	Before famine.	Died.	Remaining.	Before famine.	Died.	Emigrated.	Total decrease.	Remaining.
Ajmere ...	31,483	2,608	1,197	3,800	27,683	72,522	24,342	48,180					
Beawr	10,204	774	1,202	1,976	8,228	59,288	40,956	18,332					
Todgurh ...	7,934	1,324	968	2,292	5,642	60,211	49,431	10,780	46,960	10,894	2,258	13,152	33,808
	49,621	4,701	3,367	8,068	41,553	192,021	114,729	77,292					

At Tonk and elsewhere I have heard the mortality estimated as high as 25 per cent., and it was certainly as high as this in many Kishengurh villages which I visited. But taking the very low estimate acknowledged at first in the Ajmere district, and not allowing for the diminished mortality therein brought about by works of relief afforded to its inhabitants, I cannot be accused of exaggeration if I take this diminished estimate for the rest of the famine tract, which was certainly as severely affected as Ajmere. We shall then have—

Mortality in Marwar	480,000
Ditto in Ajmere and other districts	825,000
Total mortality ..	1,305,000

or, allowing for non-return of emigrants, about ONE MILLION AND A QUARTER OF HUMAN BEINGS.

89. At Ajmere, Tonk, and elsewhere, many besides Marwar emigrants died from starvation. The famine was so fearful, and the distress so widespread, that the population of whole districts gave themselves over to despair, which was itself but a symptom of the disease of starvation. They would not leave their villages and families to seek relief, or left them so late that they died by the way. To have supported a great country for months at the prices then prevailing, so as to have prevented very pinching distress to the majority, would have required an amount of grain which was nowhere procurable, nor for which was carriage available. In cases like the Rajpootana famine, in which distress is so widespread, and where no rail-road nor water carriage exists to bring the produce of distant countries to each person's door, the lives;

* Captain Repton himself now calculates the mortality for Ajmere as high as 25 per cent., only 16 per cent. has been here calculated.

that can be saved by human means are only few indeed compared with those who perish.

Progress of famine in Tonk.

97. The State of Tonk suffered in the same measure as Ajmere and Kishengurh from the famine. Tonk is a Mussulman State, and when the calamity was impending, the Nawab, accompanied by all his relations and the entire Mahomedan population of the city, for three successive days, proceeded on foot to a plain without the town, and there, with out-stretched arms, supplicated the blessing of rain. After July, however, no rain fell. During August cool westerly winds prevailed. In September again prayerful processions of the "faithful" issued from the city, whilst Hindoo ascetics threatened to sacrifice their lives to propitiate the anger of their deities. The price of grain commenced to rise, and jowar and barley, the cheapest grains, were soon at 12½ seers per rupee. An attempt was made to prevent a further rise, which prevented grain entering the market. People dreaded, if grain was not procurable at that period, that it would be worse still later in the season, when the demand would be greater. Every one, therefore, tried to lay in a supply of food. The grain shops were besieged by crowds, all scrambling and pushing to be served first, whilst the poor and feeble were thrust aside and could get nothing.

Fever epidemic in Tonk.

101. At the end of the rainy season fever came, which carried off all those whose constitutions had been unable to withstand the privations which all classes had been obliged to endure for a full year. One-fourth of the population in this and the neighbouring districts is supposed to have perished during the famine from all the causes which concurred to make the year so disastrous.

The Shapoora district suffered much. Having been a long time under the Ajmere Deputy Commissionership the returns were carefully kept, and the mortality showed a loss of 25 per cent. of the population, or 1 in every 4 human beings. Half of the deaths were caused by fever.

In the Meena district of the Kherar the mortality was about 1 in 4½ of the population from the same causes.

Central Provinces, 1869.

Mr. Morris's, Chief Commissioner, Administration Report, 1869-70, p. vi.

It is a fact of general observation that disease always follows in the train of famine, and the year under review was no exception to the rule. In the hot weather of 1869 there was an outbreak of cholera all over the provinces, but it was not much more severe than in former years. The exceptional mortality of the year began just when the famine ended, and when bad and insufficient food had produced its full effect. Dysentery and diarrhœa were very prevalent, and were in many cases the direct result of the famine. But the scourge of the time was fever, which in some localities seemed to prostrate the whole population; and instances occurred in which public offices were for days deserted, officials and suitors being alike unable to attend. Happily however the season

of sickness ended with 1869, and 1870 has hitherto been particularly healthy.

The report of the Sanitary Commissioner for the Central Provinces has been a valuable addition to our knowledge of the predisposing causes of cholera, and it may be hoped that the efforts which are now being made to purify the water-supply of villages will prove of real sanitary importance. It is in favor of these efforts that the theory of a connection between bad water and disease is likely to accord with native conceptions of hygienic laws.

But while cholera is being combated with some measure of success (and the immunity of some of our jails, and the success achieved in checking the disease in others, seem to show that this is really the case), fever, the disease which the late Chief Commissioner justly characterised as the scourge of these provinces, year by year falls on a helpless and unresisting population, and little or nothing has yet been done to repel it. It seems to be a well founded opinion that the inferior physical development of the natives of these parts is due more to this cause than to any other. Such being the case, this great fever question claims our most anxious attention, and the following would seem to be some of the directions in which investigation ought to proceed:—the comparative prevalence of fever among different castes, particularly among the wild tribes, as compared with other races; the effects of different diets, especially of the use of spirituous liquors and meat; the results of soil, humidity, and of elevation. All these are almost unexplored subjects of enquiry in these provinces. We have also to compile a surface geology of the country. The sanitary officer is but little concerned with the greater formations, but the minute geology of each township has for him the highest importance, and if ascertained and recorded would afford a clue to much that now seems perplexing and anomalous. It is much to be hoped that these and similar questions may receive careful attention in coming years. Theories and observations brought from other parts of India are but imperfect helps in studying a disease, the causation and type of which are believed to depend so much on local conditions; and it seems certain that, in order to attain to a better knowledge of the Central Provinces' fever, we must study it systematically at home.

VILLAGE (OR HOME) RELIEF.

North-Western Provinces, 1860-61.—Colonel Baird Smith.

25. By the combined action of this machinery of relief, suffering that is visible and tangible, or that declares itself openly and seeks help, may be, and in large measure is, met and mitigated. But there are forms of suffering which as yet no part of our relief system has reached or, as at present constituted, can reach. I have already alluded to the cruel sufferings of certain tribes in the famine tract, whose low qualifications as cultivators make their lands as little useful in supporting them as they can be. But in addition to such habits, these men have a pride of race and family that keeps them away alike from our relief houses when helpless, and our relief works when capable of work, and they deliberately prefer to remain in their wretched villages and die, rather than either to seek for charity or to work on public works. Such has been the uniform experience hitherto in the districts where these tribes of Rajpoot descent, Goojurs, and others of the same type, predominate. We totally fail in administering help to them, and of the sad mortality among them, there can, I believe, be no reasonable doubt; yet how to meet this case is extremely difficult. Help, in the way of temporary or permanent relief from demands for land revenue, is willingly accepted and has been largely given; but to relieve people from a tax only, when nearly all the produce of the land on which they ordinarily live has perished, is a mere shadow of relief. The reputation of these people for common honesty is unhappily so low, that even their head men cannot be trusted to distribute relief among them; and for supervision in any systematic way, the ordinary district agency is quite inadequate. It is possible perhaps, that the funds of the Central Committees, now so ample, might be drawn upon to meet the expense of such an addition to the ordinary district agency as would suffice to ensure these people being relieved in their own villages, to such an extent as would keep them alive. As a general rule, and under ordinary circumstances, it may be right that if a man will not work, no more shall he eat; but it is hard to reconcile ourselves to the belief that it can be right to leave men, women, and children to perish in the miseries of famine, because the adults of the race are under the dominion of perverted feelings. I have accordingly addressed the President of the Central Committee at Agra, among whose members are gentlemen who know well, from personal knowledge, the peculiarities of the races I am referring to, and have sought for this distressing subject their careful consideration.

Orissa, 1867 (Mr. [Sir] C. B. Hobhouse, President, Calcutta Relief Committee).

The object of this relief was two-fold: first, to thin the numbers at the centres, and to lead the people back to their homes and usual

avocations; and secondly, to afford relief to those who from caste prejudices, or from inability to leave their homes, or for other reasons, could not resort to, or obtain relief from the centres.

The first efforts in the direction of this relief were made through Deputy Collectors out on duty during their usual cold weather tours in 1866-67. To these gentlemen raw rice was entrusted, and they delivered it gratuitously to all apparently deserving persons in the villages they visited, at the rate of 20 days' supply to last a month.

Their agency was superseded between the months of April and August 1867 by that of Deputy Collectors and Inspectors employed under the Committee, and these agents made a systematic inspection and tour of all the villages in those parts where village relief seemed most requisite. These parts were the inundation and coast tract of the district of Cuttack, and the coast tract of the district of Pooree, especially in the neighbourhood of the Chilka Lake.

The Inspectors led the way and made lists in each village of all persons apparently deserving of relief. The Deputy Collectors followed, checked the lists by inspecting the persons in those lists, and enquiring into their circumstances, and administered relief, either by a donation of money or of clothing, or by sales of rice at reduced rates, or by gratis distribution of raw rice at the rate of 20 days' supply to last a month, or by the issue of tickets for the receipt of rice from the relief depôts, or by some one or more of these means combined.

No doubt the system was abused, and there were instances of such abuse in the issue of raw rice, in persons concealing their circumstances in order to receive more relief, in some persons obtaining tickets for relief at two different centres, in Surbarakars* extorting money on pretence of securing relief tickets, in the police extorting money on pretence of tolls from ticket-holders on their way to take relief from the depôts, and so on; but on the other hand, the distribution of relief in the villages produced many and obvious good effects. It opened out village stocks; it gave confidence generally; it saved many from the terrible death of starvation who were prevented by caste prejudices, or by the inability to move, or by the honest fear of shame and contamination, or by the unwillingness to break up the family home, from resorting for relief away from home. It rendered a people physically reduced by want of sufficient or of suitable food, a people found to be feeding in many places on wild roots and vegetables, capable once again to labor in producing the fruits of the soil; it provided the means of shelter to the houseless, and of clothing to the destitute; and so it provided safeguards against more than the ordinary sicknesses of the year, and against possible epidemics; and above all, it brought back or it retained the laboring population at their proper homes and their usual avocations: and so it tended more than any measure towards restoring the *status quo* of the province.

The financial results of such measures must, of course, tell a tale of expenditure only; and accordingly such is the tale told in table [iii], page [24]: but when it is remembered that this expenditure is spread over a period of some six months, and comprehends the relief of

[*Surbarakar, head man of village]

many hundreds of villages, some more than once relieved, the Committee trust that the total sum expended will not be considered excessive.

The following abstract shows at one glance the result of this species of relief:—

District	No. of persons relieved.	Cost.	Cost per person per month.
		Rs. A. P.	Rs. A. P.
Cuttack	148,020	99,857 10 9	0 10 8
Pooree	69,720	74,022 9 0	1 0 11
Total ...	217,740	1,73,880 3 9	0 13 9

Pooree, 1867.—Mr. Toynbee, C.S., Relief Manager.

Village relief.

The distribution of raw rice at centres had, as has been related, partially existed as a measure of relief from the beginning of the year; but it was confined almost entirely to the people of the villages at which there were centres, and was not carried out on any definite system. As the introduction of the village relief plays an important part of the history of the recovery of the district, it will be well to describe briefly the principles on which it was conducted.

Mode of conducting the village relief.

The whole district (2,473 square miles) was, for this purpose, divided into five "*circles*," each of which was placed under the management of a Deputy Collector or other superior officer, having under him Inspectors and an adequate subordinate staff of peons, messengers, &c. The *regular* system of *house-to-house* village relief was only undertaken in three circles as they embraced the tracts which had suffered most, and there was not time or opportunity to extend it further:—In the other two circles a Deputy Collector and Inspectors gave relief to all those whom they met with during their Inspection tours, who needed it. The number of persons whom they thus relieved realised the expectation at first entertained, viz., that those who were in real need of aid would easily make their cases known for themselves without being sought out by Inspectors and others at their homes. The mode of conducting the house-to-house relief in the three distressed circles was this: The Inspectors, of whom each Deputy Collector had three, went from house to house, giving tickets to those who seemed to them to need relief. At the same time they informed the recipients of the day and place fixed for them to receive their rice from the Deputy Collector. These had previously been determined by him; and by going to a village here and there he (the Deputy Collector) was able to check the Inspector's work and prevent abuses. A further check was exercised on the day of distribution when, if the ticket-holder appeared a fit object for relief, he received his rice, and either a new Deputy Collector's ticket or an endorsement on his old Inspector's ticket, by which he was authorized to draw a similar monthly supply from the godowns stated therein. If not apparently in need of help, his Inspector's ticket

was cancelled, or further inquiry made. The particulars of each ticket were then entered in the order of its endorsement in the Deputy Collector's English register of the golah from which the rice was to be paid. A corresponding Ooryah register was prepared to be kept by the golah mohurrir, and was signed on each page by the Deputy Collector, after he had compared it with his own. Thus each group of villages was finished one after another until the whole had been relieved. The Deputy Collector then took to regular inspection of *all* relief measures, and cancelled the tickets, month by month, of those who appeared no longer to need help.

The same system of tickets and registers was observed in the two *circles* in which only *miscellaneous* relief was given. All the superior officers were also provided with money, with which they relieved urgent cases not admitting of delay. The amount given was small in cases, and was only intended to last until the recipients could obtain a ticket for rice. Reports of distress sent in by the police and others were forwarded to the officer to whose circle the petitioner belonged, and were duly investigated by him or his Inspector. In many cases such information turned out to be fictitious, especially as regards reported *deaths* from starvation. These in almost every case had, it is true, actually occurred, *but during the previous year*, 1866.

The greatest difficulty met with was in the conduct of the people themselves, who left their villages before the arrival there of the Inspectors, clamoured round the Deputy Collector in crowds, and almost entirely upset all his arrangements for the issue of tickets to certain villages only on certain fixed dates. In addition to this may be mentioned the difficulty of travelling after the first breaking of the rains, and that of procuring provisions at *all* times, both being aggravated by the character of the people. The average quantity of rice given to each person was small, but it must be remembered that the larger portion of those relieved were aged or infirm people, and children. In other cases, full subsistence allowance was purposely withheld, in order that the recipients might be compelled to do *something* for themselves to eke out the supply which they had obtained gratuitously: had they got more they would have been doubtless more contented, though less really benefited. Former inmates of *chutters*, however, received a large quantity, as their circumstances were entirely different. The village relief was finished in about three months. The result of it and also of distributions of money (which was a part of the system) has been satisfactory, and enabled the relief officers to carry out the rapid breaking up of the centres which has already been alluded to.

Difficulties in carrying out this relief.

Cuttack, 1867.—Mr. Kirkwood, C.S., Relief Manager.

This relief, first commenced in May 1867, was carried on with marked advantage till November. The system was as follows:—Lists of the deserving persons were formed by respectable natives entertained as Relief Inspectors on Rs. 100 per mensem, and Rs. 30 travelling allowance. Two or three of these were attached to each Deputy Collector who had to supervise their proceedings. The

Village relief.

Inspector had to proceed to distressed localities, and, after personal inspection, draw up lists of those deserving of relief. The Deputy Collector had then to go round, and here and there check these lists. The people whose names had been entered in the lists were directed by the Inspectors to attend on a fixed day at one of the neighbouring golahs, when a ticket for rice was given by the Deputy Collector to all approved candidates, and rice, according to the amount stated on the ticket so given, was, in the presence of the Deputy Collector, served out by the person in charge of the golah. The distributions were held monthly. The amount given was generally not sufficient for the entire maintenance, but enough, perhaps, to support the persons relieved for 20 days in the month, leaving him to support himself during the other 10 days by the earnings of his month's labor. As the physical ability of the recipients increased, the supply given was first of all diminished in quantity, and then altogether withdrawn.

Money for thatching purposes (in some cases thatching materials) and clothing were also freely given throughout the district.

Rules for Village (or Home) Relief in Cuttack, 1867.

(MR. KIRKWOOD, C.S., RELIEF MANAGER.)

The rules for this relief may be gathered from the following extracts :—

In a circular issued by the Special Commissioner (Relief) on the 16th March 1867, he writes :—

"The system of relief by cooked food, there is no doubt, is not efficient to supply many of those who are incapable of labor, and have no means of supporting themselves.

"The only plan thought feasible for introducing a system of relief by issues of raw rice is by tickets.

"The district should be divided into as many sub-divisions as practicable, each under a Deputy Collector, who should be assisted by three or four Inspectors.

"Lists of persons temporarily or permanently incapable of labor should be called for, through the Zemindar* by villages, and these should be checked by Inspectors or Deputy Collectors in person. Tickets will then be issued by the Deputy Collector, which will entitle the party to receive a fortnightly supply of grain.

"The Deputy Collector will be the only person to issue tickets for gratuitous relief by raw rice, and this after ocular demonstration of the necessity by himself, or his Inspector: and for this purpose, after the lists have been made out, the Zemindar's agents should be required to assemble the persons at a convenient place for a number of villages. No person, though there may be ocular demonstration of his incapacity to labor, will be entitled to a ticket after the lists have closed, except under a certificate from the Surbarakar† that he has not been included in the list, with the reason for his being excluded. Certificate to be filed when the ticket is granted. List of casualties among ticket-holders to be given in at the centre by the Surberakar on each

[* It was afterwards found that neither zemindars, nor canoongoes' lists could be relied on. Practically the lists had to be compiled by the Relief Department—J. G.]

[† *Surbarakar* head man of village.]

day of distribution, when the tickets will be cancelled. The tickets should be numbered in a regular series for the district, and issued as much as possible by villages. All from the same village would be payable on the same day. The bearer should be paid, but the holders should be allowed to arrange for thus taking their supplies, either through the Surbarakar, or any one else in whom they might have confidence, and orders should be issued to the Zemindars to provide easy access to the place of distribution to parties who wished to come themselves. I would give supplies to last a fortnight."

On the 23rd March the Special Commissioner writes, on the same subject :—

"System of village relief as carried out in some parts of the Cuttack and Pooree districts.

"Inspectors are sent round in villages to make lists of persons who are incapable of laboring, either temporarily or permanently, and to give tickets for a monthly supply of rice, being not more than 20 seers for an adult as full maintenance allowance. For those not wholly incapable of working, smaller quantities to be given in proportion to the degree of destitution, to last a month, on the principle that the recipient should support himself for so many days by what work he could manage. Where no work is procurable, destitute persons to be admitted to relief proportioned to the degree of destitution.

The Inspectors to satisfy themselves by personal inspection of the houses what persons are fitting objects, and the Deputy Collector to check the lists as they are sent in daily, in one or more of the villages done by each Inspector; a day somewhat in advance to be fixed for distribution at particular place where all ticket-holders should be ordered to present themselves, and the Deputy Collector should then personally superintend the issue of the rice, cancelling and taking away the tickets of those who are not considered worthy objects, and endorsing those of the parties admitted to relief with the date and quantity of rice given, and the date of the next distribution.

"Distribution to be arranged for all the villages to receive from one depôt, so that they may fall within two or three consecutive days in the month, in order that the Deputy Collector may be able to be present at second distribution. This may be done by giving a larger or smaller quantity at first, according to the time to elapse before the next distribution is over, or less than a month.

"An accurate list of the number of tickets and quantity of rice distributed each time to be signed by the Deputy Collector and handed to the mohurrir in charge of the golah as a voucher for his account, and the Inspector's list to be kept by the Deputy Collector, and a copy filed at the golah for the guidance of any officer who may subsequently be deputed to distribute. If the Deputy Collector cannot arrange to be present himself at second distribution, he should depute a trustworthy Inspector to distribute and endorse the tickets as at first."

Duties incumbent on the actual distributors of this relief.

When the Inspector visited a village first of all for the purposes of making up the list, he had to enter females in a separate register from the males; the former being Register A., the latter Register B., and

these registers were then forwarded to the Deputy Collector. The information they furnished was as follows :—

Register B.—(1) name and number on register; (2) age and caste; (3) number in the family, (*a*) adults, (*b*) children; (4) former profession; (5) whether he possesses any land or has any means of livelihood at present; (6) from what cause he is unable to support himself; (7) Inspector's remarks, (8) Deputy Collector's remarks.

Register A. was the same as above, except columns 3 and 4, which should be headed respectively, (3) husband's name; (4) husband living or not, and, if not, with whom the woman lives.

Provided with these registers the Deputy Collector should visit the village, note inaccuracies and amount of relief that it appears to him the persons should receive; and on the day fixed for first distribution present a ticket to each person borne on the Inspector's list and approved by himself. The tickets are in books with counterfoil. They state (1) No. of ticket; (2) date; (3) Register and No. on Register; (4) at what depôt payable; (5) quantity to be given, (6) how long supplies to last for; (7) name of person, in whose favor given, (8) signature of Deputy Collector.

The ticket then given to the person relieved forms the evidence of the first distribution. At the second distribution the ticket is presented by the owner, and the amount of rice given at that distribution is entered on its back; thus, "2nd District, 20th August, 20 seers," and then follow the initials of the Deputy Collector. The amount of rice stated is then issued and the ticked returned to its owner, and so on at subsequent distributions; a similar note being in each case made by the Deputy Collector on the counterfoil. As his voucher, the Darogah of the store at which the distribution takes place draws up a list as he issues the rice, stating for each recipient, (1) name, (2) village, (3) pergunnah, (4) quantity of rice given; and this list when duly attested by the Deputy Collector should accompany his next accounts as a voucher.

That the Deputy Collector should himself visit daily two or three villages here and there, especially when the lists are first drawn up, and personally check the Inspector's lists are points of great importance to the effectual working of this relief. At one distribution the date on which the next will take place should be made known. When the circumstances of any individual appear to warrant a supposition that he is getting more and more capable to procure his own livelihood, a diminution in the amount of food given him may be advantageously made as a preliminary step to withdrawal of all relief.

Establishment allowed to the Deputy Collectors who conducted this distribution.

I must add a few remarks on the establishments allowed to Deputy Collectors and Inspectors, and it must be remembered that, though during the year 1867, this house relief formed their chief duty, the Deputy Collectors also had to inspect the *unnochutters* the sale golahs, the light labor gangs, and the spinning and weaving operations.

Each Deputy Collector was allowed 1 writer, 1 mohurrir, 2 chuprassees, and 2 dawk peons. If press of work required it another

mohurrir was added; each Inspector was allowed 2 chuprassees, chiefly for the purpose of conveying his lists daily to the Deputy Collector.

Orissa, 1867.—Distribution of Rice.

(MR. HOBHOUSE'S REPORT.)

This may be very shortly described as follows:—

The recipients of this gratis relief were—

1*st.*—Persons physically incapable of gaining a livelihood.
2*nd.*—Persons requiring aid to supplement a livelihood.
3*rd.*—Persons able to work, for whom no work could be found, but only until such work was found.
4*th.*—Persons in very exceptional cases (purdah women for instance) preferring from caste prejudices to starve rather than work.

The modes of it were:—

1*st.*—By the issue of a certain quantity of cooked rice twice a day to residents at the [Relief] centres.
2*nd.*—By the issue of raw rice on the system of 20 days' supply to last a month, and on the ticket system.

1860-61—N. W. P.

(MR. GIBBLESTONE'S MEMOIR, PARA. 127.)

Provision for Purdah-nusheen women.

The purdah-nusheen women formed a class, whom it was very difficult to provide for with the certainty that the kindness of Government was not abused. In Agra the most respectable of the city Punches were employed to make a house-to-house visitation, and ascertain who were worthy objects of charity. This done, one day's wages and a sufficient supply of cotton were given to every woman, with the intimation that if, on or before the following morning, she returned the cotton in the shape of thread, she would receive another day's wages and cotton sufficient to employ her for another day.

On Village or Home Relief, see also page under SPINNING RELIEF 1860-61, Mr. John Strachey, Collector.

PROVISION FOR WIDOWS AND ORPHANS.

PROVISION FOR ORPHANS.

N. W. P., 1860-61.—Colonel Baird Smith, Section III.

THERE is yet a third demand of the resources on the central committees, the cogency of which few will be inclined to question. It is some permanent provision for the orphans of various ages who are sure to be left dependent on charity for support when the famine has passed away. At present the committees have taken no final action relative to these children, because it often happens that their parents reclaim them when they are in circumstances to support them. Allowing for such cases, and also for the reception of considerable numbers by respectable Hindoo or Mahomedan families, as is a common custom in times like these, there will still remain a large, though at present an unknown, number to be permanently provided for and reputably brought up. The Christian community will probably not permit their whole support to be a charge on the means of the central committees, and the practical course adopted will most likely be to grant a liberal donation from the committees' funds to each of the orphanages into which the children may be distributed, and to invest the same under proper conditions for their benefit. For this purpose I suppose that 2,00,000 rupees or £ 20,000 would suffice.

[Rupees 2,70,000 was eventually assigned by the Relief Committee and funded to support the orphans and start them in life. (Mr. Girdlestone's Memoir para. 143, footnote)—J. G.]

Moradabad, 1860-61.—Mr. John Strachey, Collector.

25. *Orphan Children.*—The cases have not been numerous in which it has been necessary to make permanent provision for the support of orphan children. It appeared to the Magistrate that there was only one legitimate manner of disposing of such cases; this was to make over the children to respectable persons of their own faith, who were willing to receive them, taking of course every care and precaution that was possible. No difficulty has been experienced in finding charitable persons who are glad to undertake this duty, and who are fit to be entrusted with it. Seven children were thus provided for up to the end of April.

Provision for Widows and Orphans.

[FAMINE ENQUIRY COMMISSIONERS, PART II, PARAS. 12-14.]

The residue of the famine to which we have alluded may be divided into temporary, and in some sense permanent, charges on the public.

The weekly and the convalescent form the temporary charge. The emaciated invalids must be tended till they are restored to health, or their sufferings are ended in death. The convalescents are employed in the convalescent gangs till they are well enough to be absorbed in the labor market of the country. Of these classes little more need be said.

The more permanent charge may be generally divided into the widows and the orphans. The condition of the latter is obvious; they must be supported. The class of widows requires some explanation. They are in considerable numbers at all the relief stations. Many are those who have been left destitute by the death in the famine of their natural protectors. But it must be admitted that a large proportion of them are not exactly in that position. They are generally elderly women who, in ordinary times, were maintained by relatives (often comparatively distant) who were not legally bound to do so, under that indigenous social poor-law to which we have alluded. When the pressure of the famine became severe, and it was a struggle for life, people so situated were turned out in large numbers. The very old of both sexes have probably succumbed. But there remain a large number of elderly women who have survived by the aid of public relief, and who are now (either physically or by habit) unable to earn a livelihood by labor. Strictly speaking, they have just as much claim on their distant relatives as they ever had before the famine, and when the country is restored to its normal state, some of them may again find an asylum. But, on the other hand, they are people who, in any country in which there is a distinct provision for the poor, would have, in the absence of immediate relatives, bound to support them, a clear claim to public relief; and in practice, now that they are established as pensioners of the public, it would be extremely difficult to get rid of them. They may fairly say that, having saved their lives in the famine, we cannot let them die now, or turn them out on the chance of their being supported by others on whom their claim was never quite clear, and who, having once seen them otherwise supported, may now, under all the circumstances of their own condition, not improbably shut their doors against the return of these poor creatures. On the whole, then without here expressing any opinion as to the degree to which it is proper to assume the charge of the general pauperism of the country, it seems to us that these poor women, that is the individuals now receiving relief, must be maintained till they can be otherwise provided for. The rolls may be weeded of undeserving objects; they may earn something by spinning and similar work; but for the most part their maintenance must fall on the public. To the widows must probably be added some

helpless and diseased cripples who have similarly become public pensioners.

We think it extremely desirable that a line should be drawn between the duties which Government will undertake and those which devolve on the voluntary efforts of a charitable public. Under all the circumstances of the past famine, we would recommend that, in addition to the temporary continuance of direct relief, where it may be required, which we understand to have been undertaken by the General Relief Committee, reliance should be placed on the charity of a liberal public for the support of the permanent charges left by the famine—the widows and the orphans.

Orissa, 1867.—Mr. Hobhouse's Report, pp. XIX–XXII.

One of the first difficulties that the Committee had to meet arose out of the question as to the proper provision for, and disposal of, a large number of children of either sex, who had been, or who were being picked up here and there, throughout not only the province of Orissa, but the whole tract of country affected by the famine.

These children were not, the Committee had reason to believe, all orphans, but the great majority of them were so, and those who were not, had, for the time at least, been deserted by their parents or other natural guardians.

The first of these brought under the notice of the Committee were residents in Chota Nagpore, and as it was in the correspondence which passed in regard to these children that the Committee laid down definitely the principle that was to govern, at least the disposal of, and to some extent, the provision for, such children generally, this correspondence is given at length in Appendix XV.*

The principle sketched out by our Chairman in his memorandum of 2nd March 1867 was accepted generally by the Executive and the Central Committees, and by the Government, and may briefly be thus described:—

I. The ages, names, personal description, place of birth or residence, custody and parentage of the children, was ascertained and given as accurately as possible; and proclamations were made at the localities indicated, and at all thannahs, calling upon any parents, relatives, or friends, to come forward and claim the children.

II. If parents or other fit guardians of the children's creed came forward and claimed the children, they were to be given up to them, and some donation was to be made in support of them.

III. If no such person came forward, the children were to be either left in the guardianship in which the Committee found them, or were, from time to time as they came in, to be made over to such guardianship as, bearing in mind the 2nd principle laid down, the local Committees might select.

[* The papers relating to the Chota Nagpore orphans in which the principles were laid down are reprinted in this volume in small type from pp. XCVI—CVI of the original report. The papers relating to the Orissa orphans extend over 38 pages foolscap CIX—CXIV dealing with details. Only the computation of expenditure is reprinted here.—[*Compare also paras.* 24—28 *(pages* 5, 6*) of Mr. Molony's original Report.*]—J. G.

IV. Calculation was to be made in the case of each child as to the time that such child was likely to be a burden to its guardian, and as to the cost of such guardianship, and provision was to be made to meet such cost to such extent as the fund at the Committee's disposal admitted of, and to as much as possible the contentment of the guardian.

These were the principles laid down, and the first application of them was made in the division of Chota Nagpore.

It is not necessary to describe in detail the preliminary arrangements. It is sufficient to say that the orphans of that division were placed under the following guardianship, viz :—

With the zemindar of Jhurria	...	12
The zemindar of Manbazar	...	2
The Ranee of Pundra ...	...	6
Baboo Issur Chunder Ghosal	...	12
The Rev. Mr. Onasch of Purulia	...	114
The Rev. Mr. Batsch of Hazareebaugh		22
Total	...	168

And whilst the zemindars above-mentioned received the children to maintain them at their own expense, to the Rev. Missionaries there was accorded a capital sum of Rs 25,855, calculated as sufficient to maintain the children committed to their charge, making allowance for contingencies, until such time as the children should be of age to maintain themselves.

In the matter, however, of the orphans committed to these latter gentlemen, there is an application for further assistance from the Deputy Commissioner of Maunbhoon, which the Committee forward in original for the favorable consideration and orders of His Honor.

These were the first orphans for whom the Committee were called upon to provide, but the claims from the province of Orissa were still more numerous; and the history of the dealings with the orphans there will be found in detail [in Appendices XVI to XXI of the Orissa 1867 Report.]

When the Committee first commenced operations, there were 699 orphans on the hands of various guardians; and a precise account of them will be found in a communication from the Commissioner of Cuttack. [To be found in Appendix XVI of the Orissa 1867 Report.]

The question of the guardianship of these orphans had already been determined, and the question of the guardianship of any orphans coming in hereafter was, as we have above noted, to be left to the local Committees acting on the principles we have already described.

It was obvious, however, that no permanent provision could be made for orphans in the province of Orissa so long as the people of that province were not recovered from the effects of the famine and scarcity, for so long would fresh children be pouring in, and so long would the parents, relatives, or friends of such children, refrain from reclaiming them. In consultation, therefore, with the Government,

it was resolved that the Government should, for the present, make a grant of two rupees a month for every such child, and that the Committee should supplement such grant to whatever extent was necessary in order to the due maintenance and care of the children. This arrangement was to last until the close of the year 1867, and in the meantime the Committee were to make other arrangements for the permanent maintenance of all children thrown upon the Committee for support from and after the 1st January 1868.

The correspondence which ensued [will be found in Appendices XVII to XXI, [Orissa 1867 Report], and the following is briefly the result:—

On the 31st December 1867, there were 1,486 children in the charge of guardians selected by the local Committees.

As a fund for the maintenance of these children, the Committee are to make over their balances to Government.

The Government is to pay Rs. 3 a month for each child;—if a boy, up to the age of 17; if a girl, up to the age of 16.

A sum of Rs. 20 is to be paid by Government to every boy on attaining the age of 17, and to every girl on attaining the age of 16; the same to be as a marriage portion to the girls, and as a starting fund to the boys.

Nominal rolls of the children have been made up to the 31st December 1867, and are appended to this report.

The Commissioner, Collector, Civil Surgeon, or other local Officers for the time being, are to act as trustees of the fund.

In Appendix XXII, [Orissa 1867 Report] will be found a table shewing all necessary details of the orphans and their respective places of custody, and containing in the margin the latest notes made by their guardians on the condition of certain of the principal orphanages.

In pages 5 and 6 also of the Famine Commissioner's Report [Mr. Molony's,] and at pages 47 to 49 of Mr. Kirkwood's Report [Cuttack,] and in other parts of the various local reports, will be found more or less detailed accounts of the orphans; and the Committee cannot doubt but that, looking to the total abandonment on the part of their natural protectors of the children in the first instance, to their orphan condition, to the risks of what would have been something very nearly approaching to a state of slavery in the male, and of a life of prostitution in the female children, to the high and disinterested character of their present guardians, to the already improved physical and moral condition of the children, and to the sufficient monetary provision made for them, the most successful part of the Committee's proceedings have been in the provision made for these orphan and destitute children.

This provision tells at present (and as a matter of course) a tale of expenditure only; but hereafter, where many of these children, having received a highly practical and strictly moral education, shall marry and have families, and become settled amongst their fellow-country people, it is not too much to entertain a confident hope that in some of them and their descendants may be found the germ of at

least that secular enlightenment which the State is so desirous by every means to spread.

The Committee have already (see Appendix XVII) once expressed the high sense they entertain of the philanthropic exertions of those who are now the guardians of these children, and they now once again and more publicly desire to record the same.

They take also this opportunity of thanking the Revd. Mr. Hobbs, English Baptist Missionary at Magoorah, in Jessore, the Lady Superioress of the Roman Catholic Loretto House at Calcutta, the Revd. E. Dakin, Baptist Missionary at Serampore, the Revds. C. E. Wheeler and W. B. Otley, of the Church of England at Cawnpore and Ganjam, respectively, Mrs. Umbers, of the Martiniere, Calcutta, the Zemindars of Jhurriah, Kutrass, and Manbazar, the Ranee of Pundra, in Chota Nagpore, and Baboos Issur Chunder Ghosal and Bikutnarain Doss, for various offers made for the guardianship of orphan and destitute children ; and, where not accepted, only not accepted because of the disposal of the children under other guardians.

The following table shews the result of the expenditure upon orphans in the province of Orissa. The expenditure upon orphans in the province of Chota Nagpore was made upon a somewhat different method of calculation, and does not properly belong to the accounts of Orissa, and is not therefore included in this table :—

Districts.	Number of Orphans.	Cost.	Receipts.	Net expenditure.	Average cost per Orphan per month.
		Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Cuttack	10,465	42,208 0 7	13,164 0 0	29,044 0 7	2 12 4
Pooree	4,493	20,790 13 10	7,028 0 0	13,762 13 10	3 1 0
Balasore	3,188	9,895 1 3	4,099 13 9	5,795 3 6	1 13 1
Total ...	18,146	72,893 15 8	24,291 13 9	48,602 1 11	2 8 9

This table, it may as well be mentioned, although the fact is sufficiently obvious, includes not only those orphans who remain a permanent charge upon the funds, but several thousands of others who were but temporarily such a charge, and who disappeared under death, desertion, reclamation, and from other causes.

[At page XXV of Mr. Hobhouse's Report, after a return of the Relief Committee's cash balances at Rs. 4,95,206-3-8 on 1st November 1868, it is stated " we (the committee) have arranged to transfer this " sum to Government to be primarily applied to permanently provi- " ding for the famine orphans, and any balance to go towards recoup- " ing Government for the rice supplied to us for the purpose of

"Relief" * * * * [Some further disbursements were subsequently made by the Committee, and their final balances were reported at Rs. 4,60,784-10-4, namely :—

	Rs.	A.	P.
In Bank of Bengal	2,70,763	5	2
In Orissa Treasuries	1,90,021	5	2
Total ..	4,60,784	10	4

The above proposals of the Committee were found inadmissible. The Committee owed Government more than 10 lakhs of rupees for rice bought, and it was only by crediting themselves with the sale proceeds of this rice that the Committee arrived at the nominal balance of 4 lakhs assets. This of course was quite apart from the large contributions of Government to the Relief Committee. The liabilities represented by the orphans' expectations on the lowest computation put forward for the Committee amounted to Rs. 2,09,413, and in consequence of a higher rate of expenditure per head subsequently allowed to the orphans, the liability must have very considerably increased. Thus the Committee really had no assets, but only liabilities. It was useless to keep up credits and debts to a purely nominal fund, and there were other objections to this course such as the probability of applications for grants from the capital of a fund so likely to be misunderstood. Accordingly it was determined to merge the assets in the general revenue, and take over the liabilities. Since that was done, Government has incurred further expenditure for the orphans (*Deputy Accountant-General to Government of Bengal, No.* 493*LF of the* 19*th August* 1869; *Government of Bengal, General Department, to Government of India, Financial Department, No.* 3213 *of* 1*st September* 1869; *Government of India, Financial Department, to Government of Bengal, No.* 2914 *of* 4*th December* 1869.)

The rate of allowance finally sanctioned by Government, (No. 526 of 24th February 1870, to Accountant-General,) was Rs. 3 per mensem up to the age of 17 years for boys and 16 years for girls, also a donation not exceeding Rs. 20 per head to orphan boys on their reaching the age of 17 and to girls on their reaching the age of 16 or on their marriage.—J. G.]

PROVISION FOR ORPHANS.

ORISSA.

Estimate of the probable amount of provision which will have to be disbursed in each year on account of Orphans, allowing for deaths, claims of relatives, and abscondings, at 15 per cent. per annum.

1	2	3	4	5	6	7	8	9	10
YEAR.	Number of children at the commencement of the year.	Proportion of children to be superannuated during the year.	Casualties, including restorations and abscondings, at 15 per cent.	Total, columns 3 and 4.	Remaining to be provided for during the next year.	Amount payable as provision for children in column 2, at Rs. 36 per annum.	Amount payable as donation to those in column 3, at Rs. 20 each.	Total amount of provision and donation required in each year.	REMARKS.
						Rs.	Rs.	Rs.	This Statement is only intended to show the amount, approximately, that will be required in each year to be made available. The casualties in Col. 4 are calculated at 15 per cent., which includes restorations to friends, and children who may abscond, as well as deaths. It is thought that this rate is not too high. The figures in col. 3 bear the same proportion to those in col. 2 as the actual numbers in the detailed Statement do to the number that would remain in each year if there were no casualties to take into account. It will be seen that the total amount required irrespective of all interest, does not amount to Rs. 2,50,000, which it is proposed to invest, so that that amount invested should give ample to meet special cases where permanent provision has to be made, or to keep up buildings and other miscellaneous expenses.
1868	1,467	6	218	224	1,243	52,812	120	53,932	
1869	1,243	22	186	208	1,035	44,748	440	45,188	
1870	1,035	72	154	226	809	37,260	1,440	38,700	
1871	809	93	120	213	596	29,124	1,860	30,984	
1872	596	80	88	168	426	21,456	1,600	23,056	
1873	426	97	63	160	266	15,336	1,940	17,276	
1874	266	79	39	118	148	9,576	1,580	11,156	
1875	148	44	21	65	83	5,328	880	5,208	
1876	83	29	12	31	52	2,988	580	3,568	
1877	52	19	7	26	26	1,872	380	2,252	
1878	26	9	3	12	14	936	180	1,116	
1879	14	6	2	8	6	504	120	624	
1880	6	4	.....	4	2	126	80	206	
1881	2	1	.....	1	1	72	20	92	
1882	1	1	.....	1	.....	36	20	56	
		552	913	1,465*	.....	2,22,174	11,240	2,33,414	* The difference between this number and the total number of orphans on the list is two, and is accounted for by the omission of decimals in the calculation of the percentage.

SPECIAL FAMINE COMMISSIONER'S OFFICE;
CUTTACK,
The 12th February 1868.

E. W. MOLONY,
Special Famine Commissioner.

Chota Nagpore, 1867.

APPENDIX XV OF MR. HOBHOUSE'S REPORT.

From the HON'BLE A. EDEN, Secretary to the Government of Bengal, to the Chairman of the General Famine Relief Committee, Calcutta,—(No. 851, dated Fort William, the 28th February 1867.)

Sir,

IN forwarding here, for disposal by the Famine Relief Committee, a copy of a letter* and its enclosures, received from the Commissioner of Chota Nagpore, I am directed by the Lieutenant-Governor to say that whatever principle the Committee may determine upon in regard to Hindoo and Mahomedan children left destitute orphans by the famine, His Honor thinks that the care and education of the Bhumij and Sonthal children may with great propriety be at once entrusted to the Missionary—[Sic. in printed volume.]

* 215, dated 7th February 1867.

From COLONEL E. T. DALTON, Commissioner of the Chota Nagpore Division, to the HON'BLE A. EDEN, Secretary to the Government of Bengal,—(No. 215, dated the 7th February 1867.)

Sir,

IN December last, whilst at Purulia, in Maunbhoom, I attended a meeting convened by the Deputy Commissioner for the purpose of taking into consideration how the orphans, who are now receiving support from the Famine Relief Committee, were to be provided for on the cessation of relief operations.

2. There were at the time in Purulia 117 orphans temporarily accommodated in hired premises, receiving support from the Relief Committee, under charge of Baboo Issur Chunder Ghosaul, one of the members, and it is due to that gentleman to state that the arrangements for the care and maintenance of the children were most satisfactory.

3. There were still some orphans supported at the outlying relief depôts. The Deputy Commissioner estimates the total number that must need be provided for on the cessation of relief operations at 152 to 200.

4. A large proportion, perhaps two-thirds, of these orphans are of Bhumij or Sonthal tribes; the remainder are Hindoos.

5. The Reverend Mr. Onasch, head of the Purulia Branch of the Chota Nagpore Lutheran Mission, is willing to take charge of all the orphans, and maintain and educate them at the rate of Rs. 3 each child per mensem.

6. The Deputy Commissioner having proposed that the orphans should be thus disposed of, the motion was opposed by the native members of the Committee, two of those present, Baboo Issur Chunder Ghosaul and Baboo Rakhal Dass Haldar, gentlemen of liberal and enlightened views, especially on the caste question, were requested by me to state their opinions on the subject at length in writing.

7. This they have done, and their communications will be found amongst the annexures. Baboo Issur Chunder objects to the Missionary Orphanage, because the children would be educated as Christians and fed without reference to caste. Baboo Rakhal Dass would not object to the Missionary as guardian, provided, in the matter of food, the caste of the children was considered till they were of an age to chose their religion. Both gentlemen, in short, consider that if the caste of the child be broken by unorthodox feeding, he is excluded from communion with his caste brethren, and it cannot be said that he is brought up untrameled in conscience, and free to follow the rules of the Hindoo religion, if so inclined.

8. There is, no doubt, some truth in this; but no Missionary would accept the trust if bound to respect the caste prejudices of the children, and it is a matter of grave doubt if a Christian Government, in exercising the paternal functions to which, in regard to these orphans, it has succeeded, could, in justice to his own views and moral obligations, in bringing them up, recognise and uphold the institution of caste.

9. I do not, however, think we should do violence to the feelings of the people of the country in the matter. Before any irrevocable steps are taken, I would give the Hindoos and Mahomedans ample opportunity of founding orphanages equal to those which the

Missionaries are prepared at once to open to us, and give the institutions, when founded, some State support. In the event of their failing to do this the Government would be free either to accept the offer of the Missionaries or to establish orphanages of their own, in which the orphans could be reared on sound moral principles and rational views, treated as brethern,—all the children of one paternal Government.

10. The question is an imperial, not a local one, and will doubtless be so treated, but I would call attention to the recommendation in the annexed letter,* from Lieutenant Money, Deputy Commissioner, that the Bhumij and Sonthal children be at once made over to the Mission. I see no objection to this, but I think that whenever an allowance is given by the State for the support of orphans, it should be on conditions that the children are usefully as well as carefully brought up; that their physical as well as their moral training is attended to; and that all are taught some trade, and receive instructions in agriculture

* No. 26, dated 18th January, 1867.

Report of the Proceedings held at a Meeting of the Working Committee for the Maunbhoom Relief Fund, dated the 3rd December 1866

PRESENT:

COL. DALTON.	REV. MR. ONASCH.
MR. DAMPIER.	BABOO ISSUR CHUNDER GHOSAL.
„ MONEY.	„ RAKHAL DASS HALDAR.
„ DACOSTA.	„ NOBIN CHUNDER PAL.
„ WILSON.	

The Deputy Commissioner informed the Committee that he had called them together especially to take into consideration what steps should be taken for the maintenance and provision of the orphans, at present under their charge, when the relief operations ceased. The Deputy Commissioner reminded the Committee of the former discussion on this point at the commencement of the relief operations, when it determined to postpone the subject until the relief operations were drawing to a close, and said that as that time had arrived, it became necessary for them to re-consider the subject.

Mr. Dampier read some correspondence to the Committee on this subject, and pointed out to them that they would see from this correspondence that the question was not one affecting the Purulia Committee alone, but that the point to be settled was the ultimate provision to be made for orphans all over Bengal.

The Deputy Commissioner then stated his view that the orphans in question should be made over to Missionaries to be brought up by them, Government giving a monthly allowance for their support.

Baboo Issur Chunder Ghosal proposed that a Government Orphanage should be established under the immediate control of the Magistrate or Collector and Commissioner of the district, in which the orphans should be brought up in their own religion, and educated at the local Government School.

The Deputy Commissioner asked Baboo Issur Chunder Ghosal how he would have Sonthals and Bhumijes brought up, they not being Hindoos; to which Baboo Issur Chunder Ghosal answered that he would have them given the best moral education they could receive at the Government Schools.

The Commissioner asked Baboo Issur Chunder Ghosal to submit a scheme on this subject, which Baboo Issur Chunder Ghosal promised to do.

Baboo Nobin Chunder Pal expressed his opinion that all the children, irrespective of caste, should be brought up as Hindoos.

Baboo Rakhal Dass Haldar said that he was of opinion that caste should not be consulted, and would propose that the children be brought up so that they would receive the best education, being left free to choose their own religion when old enough to do so; and with this view he could let Missionaries have charge of them.

Mr. DaCosta supported the Deputy Commissioner; so also did Mr. Wilson together.

It was then determined that a report of the proceedings, with the scheme to be submitted by Baboo Issur Chunder Ghosal and Baboo Rakhal Dass Haldar, should be forwarded to the Commissioner.

(Signed) R. C MONEY,
Deputy Commissioner.

From BABOO ISSUR CHUNDER GHOSAL, PURULIA, to CAPTAIN R. C. MONEY, Deputy Commissioner and President of the Famine Relief Committee, Maunbhoom,—(dated the 21st December 1866.)

AT the special meeting of the Maunbhoom Famine Relief Committee, held on the 7th instant, I was requested to record in writing my views about the future disposal of the orphans who have been thrown under the protection of the Government by the late calamity. I have therefore the honor to submit herewith my views on the subject, which I shall feel obliged by your placing before the Committee at its next sitting.

The problem would have been one of easy solution if the religion of the governors and the governed had been the same; but unfortunately that not being the case, makes the matter rather a delicate one to handle. Having, however, in view the broad principle of religious non-interference already recognized by the Government, I do not hesitate for a moment in saying that it would not be consistent with that principle to transfer the charge of the orphans to the custody of the Missionaries, and supplementing it with a monthly sumptuary allowance, as have been proposed and agreed to by the majority of the Committee. Personally I do not advocate or uphold caste prejudices, and would be the first man, if possible, to see them trodden out of the soil of my country; but the question is—could the Government deal with it as a private individual would?

The orphan management of the country by the Government has not only a social but a very significant political bearing for the mass of the people of India, whose natural guardian is the British Government; and the point, therefore, to be solved is how would the British Government, being a member of the Christian Church, deal with the orphans of its subject races who profess religious different from its own in principle, practice, and usage, ingrained and leavened as they are, besides, with that impracticable article called caste prejudice, more strong and powerful than all their religions put together. It would, therefore, I think, be still advisable as well as expedient to continue the system of non-interference in the matter of caste and religion of those poor wretched orphans whose misfortunes have thrown them on the bounty of a merciful and benevolent Government, and I feel certain that this view would be adopted by the more intelligent and large-hearted Missionary gentlemen themselves, both here and in England, who would not give any ground to their maligners to say that undue advantage was taken in these orphan conversions. And it should be remembered in this place that the stigma of "*Bhat* or Rice Christians" already attaches to some of the Missionary Associations, and is greatly reprobated among themselves. I was once under the impression that this phrase was not known among the Christian converts in this part of Bengal, but I find I am mistaken, for in a recent report to the Relief Committee by the Reverend Mr. Onasch, it is shewn how keenly this reproach is felt by the native members of his Church, who at one time repudiated Government cooked food at the relief depôt at Illoojargo, saying they would not have it, as they were not "*Bhat* Christians;" and what would all these orphans' conversions amount to in their own eyes and the eyes of their neighbors and countrymen? Considering all circumstances, therefore, I do not think it either desirable or expedient to make over these orphans to the custody of the Missionaries, as has been proposed and noted, for it would tend in no way to enhance respect to the Christian religion and its professors and advocates. The contrary is likely to be the result.

It now remains to be seen what other course is left to the Government for the disposal of these orphans. I would in the first place propose that respectable natives should be invited to take up as many of these children as they choose, to be brought up reputably among them, with a donation, if necessary, for each head, not exceeding however, an aggregate of three or four years' keep at the moderate rate of Rs. 2-8 per month for each, including every contingency. Colonel Baird Smith, I believe, proposed a similar plan for the disposal of the orphans who came under the Government protection during the North-West famine of 1860-61, and recommended a sum of Rs. 2,00,000 (two lakhs) to be disbursed at once for that purpose. Such a measure certainly would simplify matters, and at the same time lessen trouble and expense for their keep more than if a monthly allowance were made for them till they arrived at an age to subsist by their own labor

The second plan would be to establish an orphanage in such district or division, under the immediate supervision of the officers of the Government, with an adequate establishment. In such case Government would not be required to countenance any of the absurdities of the different religions professed by the orphans, but only to take steps as would keep their castes intact till they arrived at years of discretion to judge for themselves. In the meantime the children might be educated in a manner to fit them for the work they would have to perform in life, and which might be done either under the control of the Government educational staff in the locality, or by any Missionary gentleman who might choose to devote himself to such a good work with a view to their future conversion In the latter case the children should be housed somewhere outside the Mission compound to prevent misunderstandings on the subject.

Dated Purulia, the 8th December 1866.

From—Baboo Rakhal Dass Haldar,

To—Captain R. C. Money, President of the Famine Relief Committee.

My dear Sir,

With regard to the disposal of the orphans, I have not the least objection to their being placed under the charge of the Missionaries. It is not expedient, however, that the children should be treated as *Christians* until they have arrived at the age of discretion to choose their religion.

The question remains whether the Government, as a Christian power, and as the natural guardian of the orphans, should respect the prejudices of caste till the orphans shall have reached the age of maturity? "Upon principle," I should be the last man to recommend the Government to recognise the principle of caste, which, the sooner it is done away with, the better. But on the ground of expediency, as the case is applied to all India, I would rather bring up the children (as far as eating and drinking is concerned) as their own parents, had they been living, would have done. A contrary course would give ground to scoffers to say that the Christian Government took an undue advantage of the misfortune of the orphans, and would bring the cause of Christianity itself into disrepute. In various matters the line of policy hitherto adopted by Government has been to pay some regard to the caste prejudices, however absurd they may be, and I do not think it *expedient* only that that policy should be departed from in the present case. We should remember that in regard to the caste prejudices, the Government will have to proceed only in a negative manner. The Government will not encourage the children to worship the Hindoo, Bhumij, or Sonthal Fetiches, or to observe any absurd religious ceremonies, but will merely sanction a few rules as to eating and drinking.

I believe that the public in England would take this view of the case.

No. 26, dated the 18th January 1867.

From—Captain R. C. Money, Deputy Commissioner of Maunbhoom,

To—The Commissioner of the Chota Nagpore Division.

Sir,

In forwarding the proceedings of the Relief Committee held on the 3rd December 1866, to take into consideration what arrangements should be made for the orphans now under the Committee's charge, I would take this opportunity of stating my own views at greater length than I did at the meeting.

2. The late famine has left many hundreds of children orphans, and there can be but little doubt that Government is called on to take steps for their maintenance and future provision. The only question to be solved is the course which Government should adopt.

3 Two courses appear open to the Government—

1*st*.—To allow the population to absorb the orphans by letting those who are willing to do so, take charge of individual children, and allowing a small amount for their monthly expenses.

2*nd*.—For Government itself to assume the charge of the children, and to make the necessary arrangement for their maintenance.

4. The first of these courses is one which will find many advocates, simply, I believe, because it is easily and cheaply carried out, whereas the second course is beset with difficulties. The fate, however, of children who are left to the tender mercy of those on whom they have no natural claim is so well known, and experience has shown how many are the abuses of the apprentice system even in civilized countries, that no one who consults the future welfare of these orphans could wish to see it adopted. It seems, then, that in the interests of humanity the second course is the only one which should be adopted by Government.

5. There are only three plans under which this course could be carried out—

1*st*.—For Government, while taking on itself the management of these orphans, to make such arrangements as will ensure their being brought up in the belief of their fathers.

2*nd*.—For Government, while taking on itself the charge of these orphans, to make such arrangements as will ensure their being brought up in no religious belief at all until they arrive at years of discretion, when they may choose for themselves.

3*rd*.—For Government, having taken on itself the charge of these children, to bring them up in its own religion's belief.

6. Were Government to adopt the first of these three, we should have it placed in the strange and anomalous position of a Christian Government, whose avowed hope it is to see Hindoos emancipated from caste and its attendant superstition, founding and endowing establishments in which caste and idolatry would be fostered. This is a plan

advocated by many Hindoos who consider that Government is bound to provide for orphans, and that to bring up these orphans in other than their own religion would be to depart from those principles of religious non-interference which we have ever professed. But while advocating this plan in that they would see all Native orphans brought up Hindoos, they will not propose that Sonthals be brought up as Sonthals, or Bhumijes as Bhumijes. To carry out this plan, however, with any degree of fairness, Government would have to bring up each child in its father's belief, as there is no ground on which preference should be shown to one belief above another. But that the Hindoo will not propose that Government should bring up Sonthal children to worship a tiger, shows at once the absurdity of the idea and the impossibility of Government to carry it out on any kind of principle. This plan, therefore, I think may be at once dismissed as one that no Christian Government could adopt.

7. The second plan is the one which finds the most supporters among educated natives. Baboo Issur Chunder Ghosal in proposing this plan says, "Government could not be required to countenance any of the absurdities of the different religions professed by the orphans, but only to take such steps as would keep their castes intact, till they arrived at years of discretion to judge for themselves." He has, however, in an earlier part of his letter, when speaking of caste prejudice said that they are "more strong and powerful than all their religions put together;" he might have said that caste prejudice and Hindooism are synonymous, and to carry out his idea, and bring up these children so that their caste prejudices should remain intact, could only be done by bringing them up Hindoos. There may, at first sight, appear a degree of liberality in this plan as proposed by Hindoos, but a very little examination will shew that it will simply ensure these orphans being brought up as Hindoos, for Hindoo children brought up in the due observance of caste, so that their own caste may remain intact, are of necessity brought up Hindoos. In fact to carry out this second plan as proposed by Baboo Issur Chunder Ghosal would be to adopt the first plan I have alluded to, while to carry it out literally is impossible, as, give the children to Hindoos to manage or give them to Europeans, they will one way or another way, before they reach years of discretion, be biassed in favor of the belief of those who have the management of them.

8. There remains, then, only the third, and I believe the only plan, which Government can consistently adopt. The great objection to this plan urged by the advocates of the second is that it will cause the natives of this country to view with suspicion the action of Government, and to think that we take advantage of the famine to spread Christianity. This need not be if this plan were carried out thus:—Orphans belonging to tribes which are not Hindoos, and who have no real religious belief, such as Sonthals, whose idea of a supreme power is a tiger, Bhumijes, &c., who might as well be called Christians as Hindoos, and who cannot in any way be claimed by the Hindoo population as belonging to them, should at once be made over to Missionary Orphan's Societies, a fixed allowance being granted for their maintenance and education till they arrive at a certain age. To this no Hindoo would have any right to object unless he is prepared to shew that the prejudices of Hindooism are likely to prove more beneficial to these orphans than the tenets of Christianity; that in fact it will be an advantage to Sonthals and such children to be brought up in the bondage of caste prejudice from which every enlightened Hindoo now wishes to be emancipated. There will remain the Hindoo and Mussulman children to be provided for. Let the Hindoo and Mussulman population be called on to found and endow suitable orphan establishments, in which these children will be carefully brought up in the belief of their fathers, and from which they will be fairly started in the world, such establishments being open to Government inspection and control. And if they will take on themselves the expense and responsibility in the same way that Protestant and Catholic populations do in Europe, then let the orphans be made over to them. If, however, they will not do this, Government is left free to pursue that course which appears to me the only one it can adopt, and to bring up those children who are thrown on its bounty in its own religious belief, and in no way could this be better done than by making over the children to the Missionary Societies. The offer having been made to the native population to take charge of the orphans themselves, they could not, if they refuse, charge Government with any unfair action to spread Christianity.

9. There is a German Lutheran Mission at this station, a branch of the well known Ranchee Mission. The Revd. Mr. Onasch, the head of the Purulia Mission, has expressed his willingness to take charge of these orphans and educate them at a rate which will, I believe, be found cheaper than that generally paid for orphans, *viz.*, Rupees 3 per mensem for each child. Mr. Onasch is thoroughly fitted in every way for this charge, and the noble manner in which he has exerted himself for the benefit of the starving poor while in charge of the Purulia Relief Depôt and hospital is sufficient guarantee for the care he will take of children entrusted to his charge, and I would earnestly solicit that whatever may be ultimately determined on about Hindoo and Mussulman children, the Sonthal and

Bhumijes orphans at present in the charge of the Purulia Relief Committee be made over to Mr. Onasch. In conclusion I may add that the total number of orphans in the Purulia Relief Committee's Orphanage on this date is 117. There are doubtless very many hundreds of orphans left so by famine all over the district, but they have found relatives and others who have taken charge of them; those at the orphanage are only those who have no natural guardians and no relations willing to take the place of such. The total number of such children that we shall have to provide for when the relief operations close will be, I believe, from 150 to 200.

NOTE BY MR. HOBHOUSE, PRESIDENT OF COMMITTEE.

The subject treated of in the annexed communication is of the utmost importance, and demands the very serious consideration of the Committee.

It would seem that in the district of Purulia, in the division of Chota Nagpore, there are at this moment some 150 to 200 orphans, waifs and strays of the famine of last year.

Of these, some two-thirds are said to be Bhumijes or Sonthals, and the rest apparently Hindoos.

In the town of Purulia alone there are some 117 of these orphans, and these are said to be temporarily accommodated in hired premises under the guardianship of Baboo Issur Chunder Ghosal, whose arrangements for their care and maintenance are said to be very satisfactory.

But Relief Committees and their operations are breaking up in Purulia, and the question is how to dispose of these orphans, when, on the breaking up of the Relief Committees, the means for their maintenance are exhausted.

In this emergency, the Revd. Mr. Onasch, the head of a Lutheran Mission, has stepped in and has offered to take charge of, maintain, and educate these children, on receipt of the sum of Rs. 3 a month for each child, the same, I presume, to be continued until the children are capable of earning their own livelihood.

In the matter of this offer, there will be found some eminently careful and unprejudiced remarks and suggestions, as well by European as by native gentlemen, in the paper submitted, and the offer raises the whole question of the charge, maintenance, and education of orphans of the famine,—a question which the Committee must sooner or later consider, and in the matter of which they must determine on the course of action they are prepared to recommend.

I should note in the first instance that Purulia is not within the Province of Orissa; but a large part of the funds we are administering was subscribed, not for Orissa only, but for all that part of the Provinces of Bengal and Orissa, that has suffered under the scourge of famine: and the district of Chota Nagpore, in which Purulia lies, is a part of the province which has suffered almost as severely as Orissa Proper.

Therefore, we may, in my judgment, devote a part of the funds we are administering to the relief of orphans of the famine in Purulia; and it is certain that if such orphans are not in some way provided for in a careful and fitting way, they must run the risk of many evils, of which starvation is perhaps the least.

But I gather from the papers before us that the number of orphans in Purulia itself is not more than 117, and that the number throughout the district is not more than 200; and that the cost of maintenance is not more than Rs. 3 per orphan per month, or in Purulia itself Rs. 351, or in the whole district Rs. 600 per month.

The first thing that occurs to me therefore is to enquire whether the necessity for other relief having ceased, the inhabitants in Purulia itself or in the district, cannot raise funds sufficient for the maintenance of these orphans. If they can, then to the persons who provide the maintenance may rightly be left the determination of the question of the shape which that maintenance is to take.

If they cannot do so at all, or even in part, they might let us know exactly what assistance they want, and we could then determine on the measure and method of assistance, if any, to be given.

But there are certain matters which in my judgment must obviously first be ascertained and settled before we consider the question of assistance:—

Firstly.—Are the so-called orphans absolutely orphans? In how many cases are both the parents deceased? In how many only one of such parents?

Secondly.—When the orphans are absolutely orphans, in how many cases are there not near relatives entitled and fit to take charge of the orphans?

Thirdly.—When there are parents or other natural guardians *fit* to take charge of the so-called orphans, why should not inducements be held out to such persons to take such charge,—an inducement for instance in the shape of a sum of money or of grain down, sufficient to maintain the children for a certain limited time, say until the end of October next?

Fourthly.—When there are such parents or guardians, why should they not distinctly with precautions against a bias from without, be asked whether or not they are content that the Lutheran Minister should have the charge and education of the children on the terms he proposes? If they consent, the difficulty is at an end; if they don't consent, and yet themselves won't take the children, then the Committee will know exactly what is the issue they have to determine.

Fifthly.—When there are no parents or other natural guardians, and it is not known of what persuation the children are (probably this case will very rarely, if ever, occur) and when there is a distinct offer of a reasonable kind and from a fit person (as in the case of the Lutheran Minister) for the maintenance and education of the children, then in my judgment that offer should be accepted.

Sixthly.—When there are no parents or other natural guardians, and when the children are of the Bhumij or Sonthal race, and when there is this offer of the Lutheran Minister to take them, in my judgment this offer should be accepted. I remark that the races of the Bhumij and the Sonthal are not of the Hindoo or of the Mahomedan creeds. They are honorably distinguished from members of those creeds by simplicity, truthfulness, and good faith. They believe in witchcraft and worship tigers. It is as free therefore to the State to bring the children of these races up as Christians as to bring them up as Hindoos or Mahomedans. In this conjuncture a Christain Minister steps in and offers maintenance, care, and education of the most unexceptionable kind, in the most self-denying manner on reasonable terms. It is, in my judgment, our duty gratefully to accept that offer.

Seventhly.—When there are no parents or other natural guardians, and the children are Hindoos and Mahomedans, there is a difficulty, but it is not, in my judgment, insuperable. If a Hindoo or a Mahomedan offers to take charge of, and educate an orphan of his respective creed, and if he is a *fit* person so to take such charge, and offers to do so on reasonable terms, I would accept that offer. If no such Hindoo or Mahomedan makes such offer, I would accept the offer of the Lutheran Minister; I would note that in this competition, if the Hindoo or Mahomedan labors under a disadvantage with the Christian, it is a disadvantage arising out of a difference of character and a disadvantage of the Hindoo's and Mahomedan's own creation. *Primâ facie* a Hindoo or Mahomedan is not as fit a guardian in such a case as a Christian Minister. The latter makes his offer from at least no motive of self-interest, and his character is above suspicion. The former will certainly, as a rule, take charge of the child for the immediate gain's sake, and he may have ulterior gain in view, and that, by disposing of the child, if a female, for the vilest purposes. But if a Hindoo or Mahomedan, offering himself as guardian for a child of his respective creed, is fit, he should, in my judgment, have the preference over a Christian making the same offer. Entrusted with the administration of funds contributed by persons of all creeds, we stand, it seems to me, in the distribution of those funds, *in loco parentis* of the children, and should consider what their parents would have done.

Eighthly.—What should be the principle on which we should distribute aid to the guardians of these children? It should, it seems to me, be this: We should calculate for how long a time the children are likely to be only a burden to their guardians, and what the cost of that burden is likely to be, and we should then provide for so much of that cost as the guardians will be content with and as our funds will admit of.

I throw out these suggestions (somewhat hastily, I must own, for my leisure is small) for the consideration of my colleagues, and beg their earnest and unbiassed opinion on the subject.

I circulate two private notes to my address, bearing on the subject.

C. HOBHOUSE.

The 2nd March 1867.

EMIGRATION FROM DISTRESSED TO OTHER DISTRICTS.

EMIGRATION FROM DISTRESSED TRACTS.

Moradabad, 1860-61—Mr John Strachey, Collector.*

I HAVE been requested by the Local Relief Committee of Moradabad to draw up the following account of the measures that have been taken in that district for the relief of the poor during the present scarcity. The plans which have been adopted have differed in some respects from those which have been generally followed in these Provinces, and the Committee believe that it may be useful to place upon record a connected account of their proceedings. The reports which have already, from time to time, been submitted by them, have necessarily been incomplete and fragmentary.

DIFFICULTY IN MORADABAD REGARDING IMPORTATION.—The circumstances of the Moradabad district were, in some respects, peculiar, and the system of relief, which has been so successful in the Doab, could not safely have been relied upon here. There is perhaps no district in these provinces which is more entirely dependent upon its own production for the food required by its inhabitants. The means of communication in Rohilcund are infamous, and the importation of grain, in time of scarcity, in quantity sufficient to feed any considerable proportion of the people, is a physical impossibility. It follows, as I have endeavoured to show elsewhere, that, under such circumstances, all measures must be mischievous which tend to increase the number of consumers, to check emigration, and to stimulate the consumption of the limited stock of food which is available. Great public works, such as those which have been carried on in the Doab for the relief of the people, would therefore have been a mistake in the distressed districts of Rohilcund. It it important that these facts should not be forgotten. If, unhappily, the next rainy season 1861, should be unfavorable, there will be few districts where greater caution in the organization of measures of relief will be necessary.

Counterbalancing advantages for Emigration.—The geographical position of Moradabad has, on the other hand, given it, during the past year, some important advantages, which have gone far to counteract the evils of which I have just been speaking. The people of this

* "Note on the measures adopted for the relief of the poor in the district of Moradadad by John Strachey, Esq., Magistrate and Collector," (Selections from Records of North-West Provinces, part XXXVI 1862.)

district have had means, such as have been rarely possessed elsewhere, of easy emigration to other parts of the country, where the means of subsistence were obtainable with less difficulty than at home. The relief afforded by this natural remedy against famine has been great. Probably not less than 50,000 persons have thus left the district. In the neighbouring pergunnahs of the Terai, the harvests have been abundant, and food has been comparatively cheap and plentiful. Great numbers of the poor of Moradabad have found a refuge there, or in the districts of Rampoor and Bareilly, where there has been little distress, and many have also been drawn away by the great public works carried on by the Government for the relief of the poor in the Doab. The relief works undertaken in the Bareilly district have produced, on a smaller scale, similar effects. The vicinity of the Terai, and of the forest lying immediately below the hills, has been in another respect of the utmost importance to the people of Moradabad. These tracts contain inexhaustible supplies of pasturage, and they have been the means of preserving thousands of cattle, which must otherwise have perished.

The pasture grounds on the banks of the Ganges, the Ramgunga, and the other rivers of the district, have, in the same manner, given great help to the agricultural classes, and they have thus, to a very considerable degree, been saved from one of the worst aggravations of their sufferings. There are few misfortunes so difficult for a needy cultivator to contend against as the loss of his cattle; few so destructive of those hopes of the future, which are often the strongest inducements to present exertion.

Other advantages.—Although, in the greater portion of the district, the failure of the rains of 1860 was as complete as in almost any part of these provinces, and although prices have hardly anywhere been higher, the pressure of the scarcity has been felt less heavily than in several other districts. Some mitigating circumstances I have already mentioned, and there were others not less important. In Rohilcund the soil is, comparatively speaking, moist, and an amount of rain and irrigation, which would be almost useless in the Doab, is sufficient to produce a tolerable crop. The failure of the autumn and spring harvests was by no means so complete as it was anticipated would be the case. In the extensive tract of low ground that forms the Khadir of the Ganges, and in those parts of the district which border on the Terai, the crops were often excellent. Little ground remained unsown for the rubbee harvest; and although the total produce was probably less than half that of average seasons, there was seldom that absolute failure which occurred in some parts of the Doab.

Migration.

NORTH-WEST PROVINCES, 1860-61.—COLONEL BAIRD SMITH.

I HAVE now exhausted the subject of forms of relief administered by the general community or by the State; but there remains some details to be given of those spontaneously adopted by the sufferers themselves. Among these, by far the most important, or, more accurately, the only important one, has been emigration. In all times the population

of India has been notable for its mobility under pressure, whether personal or fiscal. A population, crushed under a bad government, seeks relief, by migrating to a province under milder rule, and similarly, when crushed under a bad season, it almost intuitively seeks the same form of relief. Even before any special arrangements for their relief had been made, the people of the famine tract had adopted their traditional course, and were streaming out of the bad districts into those more or less near, in which the crops has been good, and food-grain was cheap. This exodus assumed a double direction. In one case it poured towards prosperous districts of our own or of adjoining foreign states, lying entirely beyond the famine tract. In the other, it flowed from the bad to the good; from the darkly to the lightly-shaded portions of suffering districts, as shown in Chart No. II. The determining causes in the former instances were probably only the known cheapness of food and the fair chance of work. In the latter, brotherhood feelings and the claims of a common clanship, came largely into play; thriving villages, in the well irrigated parts of the famine tract, receiving their brethren from the suffering parts, giving them a share of the culturable land of the estate to work upon, and to earn their food. In many cases, however, where means did not exist for any considerable extension of cultivation, the reception of clansmen told injuriously on the ordinary village laborers, whose work was transferred to the new comers, while they were themselves compelled to seek employment on relief, or public works, or possibly to emigrate. It would be of interest to trace these outer and inner movements of the unsettled population, but to do so with any approach to accuracy would need long and careful inquries in each district, which cannot at present be made. The inner movement would illustrate very strongly an indirect benefit due to extensive irrigation. It creates the ability in times of pressure like the present, to shelter population far greater than usual, and to give them employment remunerative to all concerned. New lands are brought under cultivation, or old lands are more elaborately tilled than usual, and it is a fact noticed universally in the harvest just cut, that either as a consequence of much virgin soil having been broken up, or much land hitherto without water having received it, or much more labor than ordinary having been applied in tillage, its yield has been of unusual bulk and weight. The result is no doubt due to the interior emigration I have alluded to, and the additional stimulus it has supplied.

Harvest after dearth very abundant.

Although it may not be practicable, however, to measure with accuracy the actual extent of these movements, some information has been supplied to me which admits of an approximation being made to it. Muttra may be taken as a type of the districts from which the emigration has been greatest. It was one of the first things which struck me on entering the famine tract, about the middle of March last, that almost every traveller or family group I spoke to on the road reported that they had left the Muttra district, and, as before mentioned, the sufferings of the people there have been very bitter. The following table supplied, to me by the kindness of the Magistrate, Mr. H. D. Robertson, shows from local inquiry the actual extent of the emigration from the different sub-divisions of the district.

Table showing the extent of Emigration from the District of Muttra up to April 1861.

Pergunnahs or Sub-divisions.	Number of Persons Emigrated.						Grand Total.	Per centage of emigration on total population.
	Agricultural.			Non-Agricultural.				
	Men.	Women.	Total.	Men.	Women.	Total.		
Nojheel	1,147	874	2,021	1,464	1,174	2,638	4,659	10
Kasee	813	61	1,427	655	516	1,171	2,598	4
Sahar	5,876	4,196	10,072	2,024	1,379	3,403	13,475	13
Arung	3,115	2,501	5,616	1,108	960	2,068	7,684	8
Muttra	1,226	907	2,133	344	284	628	2,761	2
Maat	5,245	4,000	9,245	3,945	3,077	7,022	16,267	16
Mahabun	4,057	2,942	6,999	3,797	2,926	6,723	13,722	16
Sadabad	2,763	2,010	4,773	3,805	3,051	6,856	11,629	11
Jallaisur	6,195	3,922	10,177	5,177	4,206	9,383	19,560	13
Total ..	30,437	22,026	52,463	22,319	17,573	39,892	92,355	10·5

According to the last census of these provinces, the total population of the district was 862,000, so that under the present grievous pressure about 10½ per cent. of the people have left their homes. A considerable part of this emigration flowed doubtless into our own districts, perhaps one-third of the whole was so disposed of. But from local accounts the remainder took the general direction towards Central India, and has been temporarily absorbed there. There were no local works in the Muttra district, or any other means employed to check the tendency to emigration, and the movement may be regarded as purely spontaneous. In other districts of the western section, considerable efforts were made to find temporary employment for the people on the spot. The ratio of out-flow there was therefore probably a good deal less. But still that out-flow by general agreement of authorities was considerable, and would probably not be over-estimated at three or four per cent. on the total population of the affected districts, or in round numbers about 80,000, of which more than one-half was likely to be a mere interior movement.

Again, Meerut and Allyghur may be taken as types of districts in the central section of the famine tract, where extensive areas of irrigation or numerous relief works, or other means of local employment, greatly checked the tendency to emigration beyond the district. The following return has been supplied to me by the kindness of Mr. Sapte, the Magistrate of the district, and though it is accompanied by a special warning that it is to be received with caution, it may be taken as a rough approximation to the truth :—

Statement of Emigration from the Meerut District up to April 1861.

Name of Division or Teshseelee.	Number of persons emigrated.	Percentage on total population.
Meerut	4,720	2
Sirdhanah	4,000	3
Haupper	6,518	4
Mowanah	3,500	3
Ghazeeabad...	6,000	4
Total ...	24,747	3

I am indebted to Mr. Prinsep, the Magistrate of Allyghur, for the following statement illustrating the same movement in that district:—

Statement showing the Emigration from the Allyghur District in 1860-61.

Name of Division or Tehseelee.	Number of persons who have emigrated.	Percentage on total population.
Allyghur...	5,000	2
Secundra Rao	10,000	5
Tuppul	4,000	7
Hattrass	7,000	3
Akberabad	3,152	3
Eglass	10,228	8
Attrowlee	7,500	4
Khyr	8,656	9
Total ...	55,536	5

Assuming that the returns from the two districts were made with equal care, and that consequently, though absolutely they may be somewhat incorrect, yet that they may be relied on for comparative results, it would appear that the special relief works in the Meerut district have reduced the extent of emigration by about 2 per cent. on the total population. Excepting as regards these works, the general condition of the two districts was pretty much the same. Both have the railway in progress through them, and both have canals and considerable areas of irrigation from wells. The Allyghur emigration is reported to be confined almost exclusively to the laboring classes and artizans, especially native weavers. Part of it probably flowed towards the Bolundshuhur branch works, or the works in the Meerut district, but most of it no doubt passed beyond the famine tract altogether towards Oude, and our own southern districts, or towards Central India.

Knowing the comparative conditions of each of the remaining districts of the central section, I have made out the following statement, giving a general view of the probable extent of emigration throughout its entire extent within this section:—

Saharunpore,	2 per cent., or about ...	16,000
Moozuffnugger,	3 per cent., or about ...	200,00
Meerut,	3 per cent., or about ...	25,000
Bolundshuhur,	4½ per cent., or about ...	40,000
Allyghur,	5 per cent., or about ...	55,000
Mynpoorie, (part)	... ...	3,000
Agra, (part)	... ...	3,000
Muttra, (part)	... ...	65,000
	Total ...	253,000

Moradabad represents fairly the state of the eastern section, and though I have no detailed statement of the emigration from that district, it was estimated for me by the Magistrate, from local inquiries, at about 50,000 in all, or about 4½ per cent. on the total population,

apparently a fair approximation. This would give for the entire eastern tract an emigration of—

Buadon, about	...	...	45,000
Moradabad, about	...	...	50,000
Bijnore, about	...	...	30,000
	Total	..	125,000

of which the whole is probably exterior to the famine tract, but all to districts of our own adjoining it, as those of Rohilkund, which have escaped the drought, and Oude.

Summing these results, and taking round numbers, the following would roughly represent the total emigrational movement:—

Western Section, about	...	...	120,000
Central Section, about	...	...	255,000
Eastern Section, about	...	...	125,000
	Total	...	500,000

of which about one-tenth has flowed into foreign states, six-tenths into our own districts outside the famine tract, while three-tenths have been from some parts of the tract to others.

With the exception of thus transferring themselves in search of food and work, the people did nothing else for themselves, as in truth they could nothing else. Our famines are rather famines of work than of food; when work can be had and paid for, food is always forthcoming, but people whose power to labor is annihilated at their homes, can only seek to re-establish it elsewhere, as the working population, both agricultural and artizan, have so largely, and I believe with reference to a great majority of them, so beneficially done. Although prepared for a movement of considerable magnitude, the results, as thus shown, go, I acknowledge, beyond my expectations.

I anticipate no permanent injury, however, to the districts whence this emigration has taken place. Temporary injury it must cause, of course, as other effects of the drought and dearth do, but a recurrence of regular seasons will be followed by the return of a very large proportion of the wanderers to their own villages. Among them, as I have already said, the number of proprietors of land is comparatively small.

MIGRATION AND EMIGRATION.

Ganjam, 1866.—Mr. Gordon Forbes, Collector.*

The emigration of many people to the south, and from Gumsur and neighboring estates into Sumbulpore, as well as the departure of about 800 coolies to Mauritius lessened in some slight degree the pressure upon the food supply, for these people were not always from the lowest caste; but many of those who emigrated to other

* Page 268, Parliamentary Blue Book on Madras Famine 1866.

districts were tank-diggers, by no means an indigent caste; and even some few of the Mauritius emigrants were persons who had not been reduced to absolute destitution.

MIGRATION.

Rajputana, 1869.

(From Mr. Henvey's Memoir.)

Migration.

A letter written by the Revd. Wm. Martin, of Nusseerabad, on 16th October 1868, gives an interesting picture of the people, especially immigrants, at that time:—"Already many are dependent on what is gained by selling the roots of the grass dug from the fields. Numbers have already left the British Province and gone south to districts where rain is reported to have fallen abundantly. But these are merely a handful in comparison with the crowds which for some time past have been hurrying southwards from Marwar and Bikaneer. This I had ample opportunity of witnessing about a month ago. I had occasion about that time to spend a week in the village of Bhinae, about 18 miles from this place, on the Nusseerabad and Neemuch road. A better opportunity was afforded there of ascertaining the extent of the exodus from the States just named than could have been obtained in Nusseerabad, as Bhinae is the meeting-point of two or more of the routes by which the travellers were passing through the British district. For several weeks previous to my arrival at Bhinae, multitudes had been passing daily, and from all that I could gather, the well-to-do classes had been the first to move, and had already for the most part passed that point. During the first two or three days of my stay, large numbers of farmers in conveyances, and with considerable property, continued passing or staying for a few hours outside the town. At the same time many wretched starving creatures accompanied them on foot. During the remaining days the proportion of the travellers of the latter class increased, and many of them presented spectacles of the most pitiable distress. All classes carried with them their entire possessions, in some cases represented by well-packed carts and numerous head of cattle; in multitudes of others by a paltry bundle on the head or shoulders. The better class wore a comparatively cheerful aspect, and seemed to anticipate no serious consequences to themselves or families. The poorer people, on the other hand, who had nothing to rely upon but the labor of their hands, which, in a strange country in a time of famine might ill-suffice, had a look of extreme dejection; many of them were even then dependent from stage to stage on charity, and eagerly accepted the smallest aid."

Marwar 1868—Colonel Brooke cited in Rajpootana Administration Report for 1868-69.

The Famine.

2. In reviewing the history of the past year, the subject which fills the mind is the terrible famine from which the country is suffering.

The khureef harvest.

The rainy season of 1868 commenced early in June. The first falls were succeeded by a long break, during which the grass sprouted and withered away again. The husbandman, however, ploughed his fields and sowed his seed. A second fall of rain in the early part of July caused the crops to attain a height of about twelve inches, and the grass to appear again, but not sufficiently high to be grazed by cattle. No other showers succeeded. A strong cool south-westerly wind, most pleasant to the feelings, but most disastrous to the ryot, blew steadily day and night, driving before it with tantalizing speed light misty clouds which obscured the sun, but which besprinkled the earth with no fertilizing showers. Week after week of the same weather passed. The stunted crops made futile efforts to form heads of seed, and the grass became thinner and thinner, till the fierce October sun burnt up altogether what remained, leaving Marwar an arid and withered expanse. A field here and there which had been very early sown may have escaped, but it was very exceptional. There was not a blade of grass to cut and the seed sown was lost. At Jodhpore itself, where it seldom rains either in June or July, sufficient rain did not fall to run off the rocks, so that the tanks, on which the city mainly depends for water and which were almost dry at the time, have received no supply since September 1867.

3. The Marwar ryots had been accustomed to periodical failures either of grass or of the grain crops, but the two had never failed in the same year. In the great famine of the Sumbutera of 1869 (A. D. 1813), which was the most calamitous in Rajpootana of which there is record, grain, indeed, failed, and was not to be purchased, but there was plenty of grass, and the herds were saved. The Christian era of 1869, however, when there is neither grass nor grain, will be for Marwar a far more terrible epoch. Not only is Marwar afflicted but neighboring countries also suffer. In seasons of scarcity the ryots had been accustomed to find relief in them, and especially in Malwa, which was regarded as a land of plenty, where famines were unknown. This year, however, the failure of the rainy season has been more extended, and Malwa, given up to opium, to the exclusion of grain crops, does not offer the same relief as it did in former years.

Great emigration of population.

4. The Marwar ryots without losing heart prepared to meet the dreadful calamity, and to absent themselves from their native land till the returning seasons should hold out more propitious prospects. Without waiting till the grass *en route* was dried up, they started for their voluntary exile as early as the middle of August. Putting the little grain they had left at the bottom of their carts, and spreading their clothes over it as a seat for their little ones and the female members

of their households, and driving their numerous herds before them, they journeyed in complete village communities, with grave and thoughtful, but not depressed, countenances.

5. If the prospect was gloomy when they started, what must it have been when they reached the supposed lands of promise and found the grass nearly everywhere a failure, and grain almost as dear as in Marwar? The roads they took were various. From Nagore and the northern pergunnahs of Marwar, whence scarcity of water alone would have compelled departure, they passed through Rewaree to Delhi and the Punjab. Scarcity, though not actual famine, was along this line, and the most distant spots reached brought little alleviation. From Mairta and the country north and east of Jodhpore the emigrants went to Ajmere, where was famine. Passing on, part journeyed to Malwa, but the greater portion crossed the Chumbul and settled in the Jhallawar and Kotah country. These have fared somewhat better than the first, though their herds have sadly diminished from the scanty supply of grass.

6. Two mighty streams of human beings and cattle poured from the south-eastern portions of the country. The greatest crossed the Arravalli Mountains at the Deysoorree Pass. They found some grass in Meywar, but not being able to remain, a large portion passed on to the jungle below Rutlam, and the remainder to Malwa; those arriving first securing the pasturages. Those who went to Rutlam are better off than any of the other emigrants. The Raja being a Rahtore of Marwar family, the Marwar Thakoors took advantage of the circumstance to secure an asylum for their villagers in this territory. The poor people who arrived in Malwa late had to pass on, and are reduced to the last extremity of distress. After exhausting their little stock of grain and selling their cattle to purchase food, they tried to make their way back to their homes in great destitution and misery. Numbers have been thus passing through Meywar in a starving condition. Brigadier-General Montgomery, Commanding at Neemuch, writes:—"The Marwarees are taking back but few of the cattle brought down. Numbers of these poor people die by the way. Some are left to be devoured by dogs, and others are buried a few inches below the surface of the ground, and always in nullah beds, in view that the remains may be swept down by rain to the sacred rivers."

7. The second great stream of emigrants passed *viâ* Pahlunpore into Guzerat, and some towards Radhunpore. They, too, were doomed to bitter disappointment. The great floods which devastated Guzerat in August, sweeping grass and kurbee stacks, as well as villages and cattle into the sea, buried the growing grass and left a desert for the Marwar herds. They were driven further, dying of starvation at each stage, till a few only reached the jungles east of Baroda. Here difference of climate and forage killed off large numbers, and the emigrants have been beggared. Those who went towards Radhunpore (and amongst them the Mullanee ryot) have suffered in the same way from the unsuitability of climate and forage.

Non-agricultural classes.

8. In addition to the agriculturists, nearly all the artizan and lower classes have left the country. The Guzerat floods gave employment to

these in the rebuilding of the towns and villages which had been swept away. Others who went eastward have found employment in the public works inaugurated by the British Government, which have been the means of saving many. They left to seek for countries in which grain was cheaper than in Marwar, and they have not only found cheaper food, but the wherewithal to purchase it.

Number of emigrants.

9. It is difficult to estimate the number who have migrated. The northern portion of Marwar is deserted. In the more fertile portions the towns are still inhabited, but the villages are as villages of the dead; only a few women and one or two old men being left to look after the houses. So long ago as last September, I calculated that three-fourths of the population had left the country, and I have found no cause to change my estimate further than excluding from it the Jeytaran, Sojut, and Godwar Pergunnahs, which stretch along the base of the Arravalli, and whence the emigration has not been by any means so great.

Loss of population.

10. It is too early to say how many of the emigrants will return to Marwar. There is no doubt that the population of the country will be permanently diminished, I should say by ¼ less than it was before the famine. Many will settle in the countries to which they have emigrated, and the want of good government and misrule, which has prevailed for the last few years in Marwar, will deter others from coming back. Any native state will welcome the advent of the hard-working and thrifty Jats, of whom the mass of the agricultural class is composed; and though they would naturally return to their own homesteads, yet penury and the loss of the means of ploughing their field will act as a great check to their return.

Marwar 1869—Colonel Brooke, Agency Administration Report.

2. The Report of 1868-69 brought down the account of the great famine, from which Marwar was suffering, to the month of May 1869. The agricultural population who had emigrated were in eager expectation that a bountiful Providence would open the flood gates of heaven in due season and bless the land with a teeming harvest. This expectation, however, was not fulfilled. An intercalary month (in April-May) having been added to the Calendar by the Hindoo astrologers, the emigrants anticipated that the rain would commence in the very beginning of the month of Asar, corresponding last year with the end of May; consequently they commenced to return to their homes at that time with their families and cattle, with the view of being in readiness for the early khureef sowings. They found in Marwar nought but arid and burnt-up plains, without a blade of grass for their cattle and without water in the wells. The hot winds raged wildly; the dust, whirled aloft in furious storms, was suffocating: no sign of a cloud was to be seen. Down-hearted, a second time they rushed away from the doomed land. Cholera broke out amongst them; and whilst enfeebled in body by want of food and

broken in spirit through misfortune, they fell an easy prey to the attacks of the fell malady. At each place where they halted many lay down and died. The road-sides and the banks of rivers and tanks formed generally their last resting-places, but their skeletons were everywhere scattered over the country, and for months afterwards were met with in the most out-of-the-way places.

3. In the neighboring countries the rainy season set in about the middle of June. Reports reached the emigrants that the monsoons had commenced in Marwar. A second rush to their villages was followed by a renewed disappointment. The hot furnace blast still scathed the heated plain, and the poor wanderers had to undergo a repetition of their former miseries, much aggravated, however, by their more wretched condition. Famine and cholera had not left them; and however kindly treated in the countries in which they had sought a temporary refuse, no one was now willing to receive them. They had conveyed cholera from Mullanee into Scinde after their first attempt to return to their homes. After their second attempt, the desert people, alarmed, would not allow them to cross the border, though those who had remained in Scinde were treated by Lieutenant-Colonel Tyrwhitt with great kindness, which is gratefully remembered by them. Towards Jeysulmere, also, those who returned to that city after the first false report were not admitted, but received food at a Suddhabhurt* established outside the walls, and as they too had cholera amongst them, were required to pass on. Many died miserably in the desert, trying to reach Khyrpoor, whilst others wandered about till they could return to Marwar. Fortunately the rains had commenced very early in Jeysulmere, and were unusually copious, so that the hearts of the people were opened, and they found sympathy and support.

4. Thousands of emigrants died in the countries to which they had gone: the same sad tale of their pitiable condition was received from every direction. Refugees at Neemuch, at Ajmere, and at Erinpoora offered noble examples of the charitable exertions of the residents at those stations. At Jodhpore and at Palee large sums were liberally distributed amongst the starving by the native bankers; but the relief given only prolonged existence for a few days. Those that were famine-stricken were doomed, and but a small percentage recovered. To show the dreadful condition to which the emigrants to other countries were reduced, I may mention that the mortality amongst a body of 3,000, who had arrived together at Pahlunpore from Guzerat, was at the rate of 40 daily for several days together, till only a few were left. The diminution in numbers was not so palpable to the senses, because daily arrivals counterbalanced the casualties. The average mortality at any place through which a stream of emigrants passed may be taken at the rate of from 8 to 10 per cent. per diem. At Pahlunpore, at Oodeypore, as elsewhere, relief was applied, but careful nursing was required as much as food, and this could not be given, except in exceptional cases, as at Erinpoora, where four hundred children were thus saved. The distress was so wide-spread that even partial relief could reach but a few of such as needed it.

* *Suddhaburt* literally alms according to vow (Hindu), or standing distribution of alms, especially food.—J. G.

5. Those who remained at their homes, however, were in a much worse plight than those who had emigrated. The latter were able to procure food by purchase or by charity, but the former, in country villages, away from large towns, could obtain none whatever; and numbers with means of purchasing perished from starvation. Even at Jodhpore and Palee for days together, no grain was to be had, notwithstanding the numerous convoys which reached those places; and many respectable and well-to-do people were reduced to great extremities.

6. The increase of distress during the famine is shown by the ruling prices of wheat in the Jodhpore Bazar, commencing from July 1868, when famine was not anticipated. The lowest price quoted during the period was $3\frac{8}{4}$ seers per rupee, but the stocks were so completely exhausted that the rates during June, July, August, and September 1869, were quite nominal. Those who were obliged to buy had to purchase at exorbitant prices far above the quoted rates.

Price of wheat at Jodhpore during famine of 1868 *and* 1869.

Months.	British seers per Rupee.	Months.	British seers per Rupee.
	Srs. Ch.		Srs. Ch.
July 1868	14 8	June 1869	5 8
August „	12 0	July „	5 0
September „	8 12	August „	4 12
October „	6 10	September „	4 9
November „	6 0	October „	5 10
December „	6 12	November „	5 10
January 1869	6 10	December „	6 0
February „	6 8	January 1870	6 8
March „	6 8	February „	6 8
April „	6 0	March „	6 12
May „	5 8	April „	7 0
		1st May „	8 8

PRICES OF FOOD-GRAIN DURING SCARCITIES.

PRICES.

Price currents: how far do they really gauge the situation?

ORISSA 1866.—FAMINE ENQUIRY COMMISSIONERS, PARAS. 121—125.

Allusion has been made to the prices current which were called for and published. The Government, after communication with the Chamber of Commerce, seems to have made the suggestion, and the Board of Revenue called for weekly returns from each district and regularly published them. On the one hand, the Board seem to have placed an almost superstitious reliance on them as a panacea for all evils, and on the other, their accuracy has been much questioned. We would, therefore, here notice the whole subject before proceeding with the history of the famine. As respects accuracy, it is now admitted that the official returns cannot be relied on as exact. Such tables prepared by persons unaccustomed to the work are apt to be occasionally loose and inaccurate, and this is especially so when, owing to shortness and irregularity of supply, there can hardly be said to be any well sustained market rates. It is stated by the Secretary to the Board (Mr. Chapman) that the column "ordinary price at this season" turns out to have been generally inaccurate, and a comparison with the averages calculated on the returns furnished to us, as well as the extreme discrepancies in the returns of neighboring places, seem to show the fact to be so. For the rest, in the native mind, it is above all things difficult to disconnect the two ideas of returning actual prices and fixing a price. The police and others who made the returns may sometimes have returned rather prices as they ought to be than those at which rice was actually available; and even if the prices were real, Government servants could sometimes get rice when others could not. Error was then probably more frequently made in representing the rice to be cheaper than the reality rather than the contrary.

Discrepancies in price quotations.

In the head-quarter stations of districts, such error was not likely to be large, but there is another source of discrepancy which has been made very apparent in the Cuttack returns. The Board have throughout taken the "cheapest sort" as the standard of the price of the food of the people. But it appears that in fact there is generally in the market minor quantity of fine rice on the one hand and of a red imperfectly husked variety on the other, while the mass of rice in the market, in fact the ordinary food of the people, is an intermediate kind more properly designated as "common rice." The statements of the officers of the Irrigation Company founded on actual transactions seemed at first hopelessly irreconciliable with the Board's prices current; but we discovered that while the Collector of Cuttack was furnishing prices of two sorts of rice, dearest and cheapest, according to the Board's forms, the Commissioner was at the same time sending a price current of his own, stated by him to be carefully prepared from personal observation. He gives three kinds, and his intermediate kind called "common rice" does not very materially differ from the rates given by the Irrigation Company, although he explains that the supply and sales were so irregular that the price varied from hour to hour and from one street of Cuttack to another.

During great dearth prices often really nominal.

In truth, all minor differences apart, the main point in respect of which the prices current were, it proves, wholly misleading, is that they were very frequently (in fact through the greater part of the season, and in most places it may be said most frequently) wholly nominal, rice not being procurable. It is most certain that it was not procurable at the quoted rates in any quantity. Even when the shops were open, any attempt to buy more than ordinary daily rations, it may be said, the slightest rumour that purchases were to be made, at once sent prices up to prohibitive rates.

At such times price quotations are an imperfect criterion.

It also seems to us that supposing the tables to have been reliable, the Board of Revenue hardly made consistent use of their own materials and their own principles. Prices in districts of cheap grain and low wages were too much judged by a metropolitan standard, and were on that basis supposed to be reasonable when they were really extreme in relation to the ordinary local prices; allowance was not sufficiently made for the cheapening at harvest time, and the invariable enhancement as the season proceeds; and even, it may be said that when prices rose to rates more and more distinctly famine, throughout February, March, April and May, both the Government of Bengal and the Board, deserting their own principles of political economy, seem to have actually or tacitly acquiesced in the explanation that the rates were no true index of the supply, and that the dealers were only combining to hold back stocks with a view to artificial enhancement of prices.

The fact that even prices apparently tolerable are no sufficient index to the state of the people, if other local circumstances are put out of view, is well stated in the following extract of a letter from Lieutenant Money, Deputy Commissioner of Maunbhoom—a remote and uncivilized district:—

"I must make another attempt to try and convince you that there really is famine in the south-east of Maunbhoom, and that the returns I have sent up from a few grain marts cannot be taken as indicative of prosperity in Raipore. Our resources were weak when the failure of crops came on us. The immediate sufferers are of two classes—those who cultivate just enough for themselves and families to live on from one harvest to the other, and those who live by labor, working mostly for petty farmers, who pay them in food. The first of these two classes lost their crops, and not only so, but have by this failure been plunged deeply into their mahajuns' books, as most of them borrow grain for sowing on promise of repayment at exorbitant interest when the crops are ripe.

"This is not a class who have money with which to buy food, and being already deep in their mahajuns' books, the latter do not care to lend them rice now. The second class are starving, because the petty farmers who at this time of year, as a rule, employ them, will not do it, having themselves no rice with which they could pay them.

"I must maintain, as a fact, that the price currents at one or two bazaars are no criterion of the real state of any particular spot some little distance from them."

The Board of Revenue, especially, seem to have taken every cheapening of price as an indication that their first expressed opinions were right. On the 24th January 1866 they reported that prices in Pooree were "happily insufficient to tempt exporters from the opposite coast." It is true that the last Pooree price current then before them, that of January 15th, showed rice to be from 11¾ to 13¼ Calcutta seers per rupee, but about that very time the Collector (as we now find) was elaborately explaining to his immediate superior that it really was not to be had, and the Pooree prices current of the two following weeks, ending 23rd January and 29th January, showed a very rapid fall first to 10¼ and then to 8¾ seers, in fact to about four times the average price of food. Such a rate in any country means famine, especially, if a long period must elapse before another harvest. Yet we cannot find that the Board corrected the impressions which their letter of 24th January might have created, or that the subsequent enhancement in all the districts to 8, 7, 6 seers in March and April, and still further enhancement in May, caused any special enquiry on the subject till it was too late.

Course of prices in Orissa from October 1865 to December 1866.

For convenience of reference we here give a table of the price of common rice throughout the season at Pooree, Cuttack, and Balasore, respectively, made as approximately correct as we can by collating the different returns :—

Approximate prices of common Rice in Pooree, Cuttack, and Balasore given in seers (of Tolas 80 weight) per Rupee.

	Pooree	Cuttack	Balasore	Average
Latter part of October 1865	8 to 13	8 to 15	11 to 16	12
Week ending the 13th November 1865	8	12	15	11½
Ditto 20th ditto	10	11	15	12
Ditto 27th ditto	11¼	10½	16	12¾
Ditto 4th December 1865	12	11¼	16	13¼
Ditto 11th ditto	12	11¼	16	13¼
Ditto 18th ditto	13	13	16	14
Ditto 28th ditto	14	14	14	14
Ditto 1st January 1866	14	14	13	13¾
Ditto 8th ditto	13½	14	13	13½
Ditto 15th ditto	12¼	12	13	12¼
Ditto 22nd ditto	10	12	11	11¼
Ditto 29th ditto	8¾	11¼	10	10
Ditto 5th February 1866	8¾	9¼	11	9¾
Ditto 12th ditto	9¼	8¾	9	9
Ditto 19th ditto	8¾	9	9	9
Ditto 26th ditto	9½	9½	9½	9½
Ditto 5th March 1866	8¼	9½	9½	9
Ditto 12th ditto	8	9½	10	9¼
Ditto 19th ditto	8¼	9¼	10	9¼
Ditto 26th ditto	8	8¾	7¾	8⅝
Ditto 2nd April 1866	7¾	7¾	7¾	7¾
Ditto 9th ditto	6¾	7¾	7¾	7½
Ditto 16th ditto	7¾	6¾	8¼	7¾
Ditto 23rd ditto	6¾	6	8¼	7
Ditto 30th ditto	6¼	6	8	6¼
Ditto 7th May 1866	6¼	6¼	8	7
Ditto 14th ditto	6¾	6	8	7
Ditto 21st ditto	6¾	5	6¾	6¼
Ditto 28th ditto	6	4¾	6	5¾
Ditto 4th June 1866	6	4¾	6¼	5¾
Ditto 11th ditto	5¼	4¾	6	5¼
Ditto 18th ditto	5¾	4	5¼	5
Ditto 25th ditto	5¾	4	5	5
Ditto 2nd July 1866	6¼	4	5	5
Ditto 9th ditto	6¼	4	5¼	5⅛
Ditto 16th ditto	5¾	4¾	5¼	5¼
Ditto 23rd ditto	5¾	4¾	6	5¼
Ditto 30th ditto	5¼	5	4¾	5
Ditto 6th August 1866	5¼	5¼	4¼	5¼
Ditto 13th ditto	5¾	5	3¼	4¼
Ditto 20th ditto	5¾	4¾	4¾	5¼
Ditto 27th ditto	5¼	4¾	4¼	4⅝
Ditto 3rd September 1866	5¼	5	5	5⅓
Ditto 10th ditto	6¼	5¼	5	5¾
Ditto 17th ditto	7¼	6	6	6¼
Ditto 24th ditto	7¾	7	6	7
Ditto 1st October 1866	7¾	7	7	7⅓
Ditto 8th ditto	8¼	7	6¾	7¾
Ditto 15th ditto	7¼	7	9	7¾
Ditto 22nd ditto	7¾	7	9	8
Ditto 29th ditto	7¼	8¼	9	8⅓
Ditto 5th November 1866		8	11	9¾
Ditto 12th ditto		11	17¾	14¼
Ditto 19th ditto		13¾	17	15¾
Ditto 26th ditto		15¾	20	17¾
Ditto 3rd December 1866		15	20	17½
Ditto 10th ditto		15	19	17
Ditto 17th ditto		10¾	19	14¾
Ditto 24th ditto		10¾	19	14¾
Ditto 31st ditto		12	15	13½

It will be observed that, though there are some local oscillations, the downward course of the average rate is singularly regular. The result of the price table is that for the space of five months in the best supplied markets, and those most aided by Government sales, the price of food, supplied in a very intermittent way, ranged from five to ten times the ordinary or average rate. In the interior of the districts food was generally not to be procured for money, and when sold, ranged up to about thirty-five times the ordinary price.

N.-W. P., 1868-69.—From Mr. Henvey's Report, pp. 128, 129:

Prices as tests of famine.

If this be true [that scarcities short of famine affect not the agricultural but the non-agricultural classes, then] it follows that what should chiefly be looked to when famine is apprehended is the state of the labor-market. It also follows that the price of food may rise and fall, but so long as the laboring poor can get work, there will, as a rule, be no need of relief, and *vice versa*.

Prices an insufficient test. Illustration.

Prices, in short, enable no one to foretell at what moment a famine is imminent and at what moment it will cease. This truth is illustrated by the following figures:—

BIJNOUR.

Month.		Price of wheat.		Daily number on relief works.	Daily number in poor-houses.
		S.	C.		
December	1868	10	4	1,741	.....
January	1869	11	4	2,464	.....
February	„	12	0	2,787	1,829
March	„	12	5	18,697	6,229
April	„	14	5	14,089	4,264
May	„	15	3	10,697	1,521
June	„	15	12	3,414	1,468
July	„	12	12	3,957	1,750
August	„	10	1	7,876	2,553
September	„	10	4	6,530	2,184
October	„	9	15	1,485	668

Comparison between prices and relief returns in Bijnour.

From this table it appears that the greatest pressure occurred in March 1869. At that time there was a market fall in the price of wheat, but the sugar-cane sowings had been completed, less employment was procurable in the fields, and therefore the demand for relief became very urgent. In April came the harvest: employment could be obtained and numbers rapidly fell. In May and June prices declined, but the

reason why the numbers of poor laborers also decreased is that the Rujjubpore works had been opened, and those who could go were forced thither by reduction of wages. During August a rise in prices and also in numbers is perceptible. There was, however, in this month a temporary break in the rains, and it was feared that the crops would be again destroyed. Consequently work in the fields was at a stand-still. That high prices at this time had little influence on the demand for relief is apparent from the October figures. Wheat was then dearer than ever, but the laborers and paupers were so few that all operations ceased at the end of the month.

Prices had little influence on demand for relief.

Take also the cost of:—

The same results in Lullutpore.

LULLUTPORE.

Month.		Price of wheat.		Number on relief works.	Number in poor-houses.
		S.	C.		
September	1868	10	8	1,070	206
October	,,	12	8	2,955	300
November	,,	13	0	4,639	437
December	,,	13	0	5,455	484
January	1869	13	1	18,620	1,720
February	,,	12	12	20,273	3,053
March	,,	13	1	8,176	4,471
April	,,	14	2	18,612	4,842
May	,,	13	2	12,123	4,293
June,	,,	10	7	5,295	5,378
July	,,	8	14	1,474	4,873
August	,,	8	11	3,085	4,719
September	,,	9	5	1,021	2,721

It will suffice to compare the variations in numbers of laborers during February, March, and April, with the steady prices ruling in those months, and to mark what the numbers were in September, 1869, when wheat was at 9¼ seers, and what they were in February, 1869, when wheat was at 12¾ seers. No such variations are visible in the poor-house returns, mainly, no doubt, because a large proportion of the inmates were foreigners, who would not be affected by the local opportunities of employment.

The above cases have been taken as illustrations of districts in different parts of the provinces where distress was regulated by other causes certainly than the quotations of food. Ajmere has not been cited, because as regards that district, it has been argued that relief operations were

What these illustrations prove.

injuriously contracted by the authorities at the time when prices were rising; and it would not be fair, on the other hand, to present the resulting diminution of numbers as a proof that prices had nothing to do with distress. But experience has shown in almost every instance throughout the provinces that prices, though they may indicate a state of affairs in which famine is impending, cannot be regarded as an infallible test of distress.

The suddenness of demand for relief.

The following remarks in the introductory chapter to the Administration Report of 1868-69, bear upon this subject:—

"The severest distress often supervened without warning upon apparent ease and comfort. This was seen more or less in most places, and in some the vicissitudes were very striking and very sudden. When the Lieutenant-Governor passed through Bijnour about the 20th November, there was as yet no symptom of want. By the beginning of December, distress and even despair had seized upon the district. Again, *the rain in December and January afforded relief and employment*, and inspired new hopes, but in a month or six weeks want again returned in redoubled force, and relief had at once to be provided for some twenty thousand of the starving poor. So in Bareilly the harvest had been tolerable, wheat sold at 16 seers per rupee in May 1869, and no scarcity was apprehended. But prices rapidly rose in June to 12 seers, and in July to between 8 and 9, and suddenly the Magistrate found himself beset by several thousands of the poor clamorous for food. There was no interval or pause between apparent plenty and dearth bordering upon famine."

Bareilly an exception.

In Bareilly, therefore, a sudden rise in prices did uncover a great amount of suffering and distress, but, generally speaking, the quotations of the market gave no warning. It is impossible to say what degree of pinching and privation the poor labouring population will not be prepared to endure, provided that the condition of agriculture and trade is such as to give them hope of employment.

High price of food an indication of impending distress.

It is undoubtedly true that, when wheat rises to three times the usual price, famine is to be apprehended, but no one can venture to assert that need for relief will not be urgent long before prices have reached that maximum, or that the need will not altogether cease, though prices may have risen still higher. Markets, therefore, should be closely watched with the view of estimating the stock of food supplies, but there is no test of distress save the tentative opening of poor-houses and relief works, in which labour is rigidly exacted. All necessary preparations may be made when wheat rises to 10 or 12 seers for the rupee, but nothing except trial and experience will indicate the moment for active operations.

But the only way to test need for relief is to undertake tentative operations.

During times of dearth the inferior food-stuffs become dearer in proportion than the superior kinds do. (Mr. Plowden's comparative table for N.-W. Provinces, 1832 to 1869.)

[EXTRACTED FROM MR. HENVEY'S MEMOIR.]

Central Committee's comparison of rates with those of previous periods.

The Secretary to the Central Committee, Mr. W. Chichele Plowden, has entered in his report an interesting table of prices of the main staples of food during the famine compared with rates ruling in former years. The table is given below. It must of course be observed that the rates in columns 5, 6, and 7 are those registered for the period during which poor-house relief was administered, not the general averages from July 1868 to March 1870 :—

DISTRICTS.	AVERAGE SELLING-RATE PER RUPEE OF WHEAT.								AVERAGE SELLING RATE.			
	1.				2.		3.		4.		5.		6.		7.	
	Decennial rate in pounds and seers, 1832 to 1842.				Decennial rate, 1858 to 1868, in seers.		Rate in 1860, in seers.		Rate in 1861, in seers.		Rate in 1868-69 for the period relief was given in seers.		*Of bajra.* For the period relief was given in 1868-69, in seers.		*Of joar.*	
	lbs.	oz.	S.	C.	S.	C.	S.	C.	S.	C.	S.	C.	S.	C.	S.	C.
Lullutpore ...	...		...		...		...		...		11	7	...		12	7½
Jhansie ...	...		...		...		...		...		10	6½	13	8	12	2½
Bijnour ...	82	4	41	0	...		...		...		12	7¼	11	4	12	4¾
Moradabad ...	68	8	34	0	20	15	15	1	14	2	9	12½	9	10	11	4
Budaon ...	56	0	28	0	21	7	15	3	15	8	12	0¾	9	0¾	10	9
Bareilly ...	51	10	25	13	21	11	18	9	15	12	11	2	11	3	11	7
Shajehunpore ...	69	6	34	11	...		...		...		9	9½	...		...	
Muttra ...	54	12	27	6	19	14	17	8	13	10	11	5½	13	1½	14	14½
Furruckabad ...	64	15	32	7	21	12	18	12	17	3	13	0½	14	2¼	14	2¾
Mynpoory ...	63	2	31	8	...		...		...		12	2	12	4½	12	6¾
Etawah ...	50	2	25	1	...		...		...		12	1½	...		...	
Jalaoun ...	...		...		...		...		...		10	9½	10	11½	11	5
Banda ...	...		...		20	9	25	14	22	3	10	12	9	15¼	13	2¾
Allahabad ...	36	11¼	18	5	18	2	20	13	19	4	11	1½	12	6½	14	5
Humeerpore ...	...		...		...		..		...		8	3	14	7	15	8
Mirzapore ...	...		...		18	2	20	13	19	9	10	9	12	0	12	0
Benares ...	...		...		17	3	19	1	17	12	11	5	13	12	11	2
Ghazeepore ...	...		...		16	8	18	1	17	13	12	5	11	11	12	8

Observations made by the Honorary Secretary.

Mr. Plowden adds the following observations :—

"The first column, giving the average decennial rate of wheat for the ten years ending 1842, is taken from a report of Mr. Bird's when relinquishing office as Member of the Revenue Board. The decennial rate given in the second column is taken from the monthly price-currents published in the *Government Gazette*, and from the same source have

been taken the entries in columns 3 and 4; columns 5, 6, and 7 have been filled up from the weekly price-current now compiled by the Allahabad Revenue Board by order of the Imperial Government. It is to be regretted that no information is available from which conclusions might be come to regarding the rise in prices in the past forty years in the Jhansie and Benares Divisions, such as may be formed by a comparison of the entries in the first two columns for many of the other districts. The rise in prices throughout the country is brought out in startling relief by contrasting columns 1 and 2 with one another, while the pressure of the famine is not inaccurately indicated by a comparison of column 5 with column 2. The entry for column 1 against Allahabad would appear to be incorrect, but as it stands thus in Mr. Bird's statement, it has been left as it is. In Cawnpore and Futtehpore the selling-rate (decennial rate) is given in Mr. Bird's statement as 29 and 28 seers, and it is hardly conceivable that the Allahabad average should have been 18 seers, when in the neighbouring districts the rates were so conspicuously higher. It is not improbable, therefore, that the entry against Allahabad is a *lapsus pennæ* for 28 instead of 18."

Further remarks on the Committee's table.

It may also be noted that according to the above table in *Lullutpore* during 1868-69 *joar* was only a seer cheaper than wheat. In *Jhansie* both *bajra and joar* were nearly three seers cheaper.

Bijnour.—The price of wheat in 1869 was more than three times the rate from 1832 to 1842. *Bajra* and *joar* were dearer than wheat.

Moradabad.—Compared with the period from 1832 to 1842, wheat had risen in the decennial period ending 1868 by 39 per cent. The price of wheat in 1869 was more than 5 seers dearer than the rate prevailing in the famine year 1860-61, and *bajra* was dearer than wheat.

Budaon.—The price of wheat from 1858 to 1868 was nearly 25 per cent. higher than from 1832 to 1842. The rate in 1869 was higher than in 1861, and both *bajra* and *joar* were dearer than wheat.

Bareilly.—The increase in the decennial period ending 1868 was about 16 per cent. The price of wheat in 1869 was higher than in 1861, and *bajra* and *joar* were as dear as wheat.

Shajehanpore.—The rate quoted for wheat was only for a few weeks in the autumn.

Muttra.—The increase during the period from 1858 to 1868 equals 27 per cent. *Bajra* in 1869 was dearer than wheat in 1861.

Furruckabad.—The increase in the price of wheat shown by columns 1 and 2 is about 33 per cent. *Bajra and joar in* 1869 *were three seers dearer than wheat in* 1861.

Jaloun.—The rates appear to be higher than in Jhansie and Lullutpore. But the explanation is that the period taken into calculation in the case of the former district is a few months at the height of the famine, while the average in the two latter extends over 14 months.

Banda.—The high price of wheat compared with the rates in 1861 is remarkable.

Great scarcity of the coarser grains.

But perhaps the most noticeable point is the extreme dearness of the coarse grains, *bajra* and *joar*, in many of the districts. These are grains on which large numbers of poor people usually depend for subsistence. As has been stated in several of the narratives, there were times when neither *bajra* nor *joar* could be bought at all, and the poor were driven to eat roots, and weeds, and water-nuts.

Comparison of highest prices in 1837-38, 1860-61, and 1869.

Another proof of the great dearth of food is to be found in the higher rates prevailing in 1869 compared with those in the previous years of famine, 1837-38 and 1860-61. The following table has been compiled from Mr. Girdlestone's report on past famines in the North-Western Provinces and from the statement of wheat appended to this narrative:—

Wheat.

District.	Highest price in 1837-38.	Highest price in 1860-61.	Highest price in 1869.
	S. C.	S. C.	S. C.
Allygurh	18 0	10 4	8 4
Allahabad	17 8	16 4	9 0
Cawnpore	13 8	15 0	9 2
Furruckabad	12 8	13 0	9 0
Muttra	12 0	9 0	8 8
Agra	11 8	9 12	8 2
Banda	10 0	19 8	7 15
Boolundshuhur	8 0	.....	8 11

Remarks on the comparative table.

From this it appears that neither the famine of 1837-38 nor the famine of 1860-61 can compare with the famine of 1868-69 in reference to the effect of the drought on the price of the main staple. It must be admitted of course that prices had generally risen since the two former periods, and probably wages had also increased; but if the view taken in this narrative be correct—if the main cause of distress was the want of employment rather than the want of food—then the selling rate of grain indicates absolutely the pressure of famine, for it is evident that when a labourer cannot earn wages he must starve or live on his savings, and the higher the price of bread becomes the sooner his savings will be exhausted. Whether high rates are an infallible test of actual distress, that is to say, whether it can be surely predicted that when the price of what rises beyond a certain limit Government must be prepared to open poor-houses and start relief works, is another matter which will be discussed hereafter. The fact that the famine of 1868-69 did not assume the fatal dimensions of the two previous calamities must, therefore, be explained otherwise than by a comparison of food-rates in the three periods. The people must either have been better prepared to withstand the pressure, or the Government must have been more successful in coping with it. In the writer's [Mr. Henvey's] opinion the fact is attributable to both causes.

Causes why the famine of 1869 was not so disastrous as previous famines.

PRICES FROM 1862 TO 1866 IN THE PATNA AND BHAUGULPORE DIVISIONS.

From Mr. Cockerell's Report.

Statement showing the average prices of the edible grains in most general use amongst the poorer classes in the several Districts of the Patna and Bhaugulpore Divisions, including the Sonthal pergunnahs, during the four years previous to 1866.

District.	Description of edible grains in most general use by the poorer classes.	1862.		1863.		1864.		1865.	
		Seers.	Chit.	Seers.	Chit.	Seers.	Chit.	Seers.	Chit.
Patna Division.									
Chumparun	Rice	32	...	30	...	20	...	16	...
	Indian corn	44	...	35	...	35	...	24	...
	Pulses	22	...	25	...	20	...	16	...
Gya	Rice	25	...	27	8	20	...	12	...
	Indian corn	32	...	40	...	37	...	19	...
	Gram	26	...	31	8	29	...	16	..
	Pulses	34	...	43	...	39	...	18	...
Patna	Rice	30	8	26	5	25	1	15	...
	Gram	31	13	37	5	28	13	21	2
	Pulses	40	5	51	8	44	2	25	...
	Indian corn	38	3	46	8	23	15	21	2
Sarun	Rice	46	8	46	8	27	4	13	...
	Indian corn	64	...	52	...	46	...	15	14
	Pulses	39	...	42	...	35	...	16	...
Shahabad	Rice	30	...	25	...	20	...	12	...
	Indian corn	44	...	40	...	28	...	16	...
	Pulses	40	...	40	...	28	...	14	...
Tirhoot	Rice	32	...	35	...	28	...	12	...
	Indian corn	35	...	42	...	35	...	16	...
	Pulses	32	...	35	...	32	...	14	...
Bhaugulpore Division.									
Bhaugulpore	Rice	27	...	26	8	25	4	13	2
	Indian corn	...	...	38	...	31	4	17	5
	Pulses	...	...	22	11	22	11	12	12
Monghyr	Rice	30	...	31	...	26	...	13	...
	Indian corn	43	...	52	...	40	...	16	...
	Pulses	23	...	27	...	27	...	12	8
Purneah	Rice	...	...	36	...	31	...	17	...
	Gram	...	...	21	8	22	13	12	2
	Pulses	...	...	21	4	21	3	16	8
Sonthal Pergunnahs.									
Deoghur	Rice	35	...	30	...	22	...	14	...
	Indian corn	45	...	50	...	40	...	18	...
	Pulses	24	...	18	...	14	...	11	...
Doomka	Rice	34	8	34	12	25	14	16	...
	Indian corn	50	...	50	...	50	...	20	...
	Pulses	40	...	30	...	25	...	20	...
Godda	Rice	35	...	35	...	35	...	18	8
Pakour	Rice	27	12	26	2	21	12	15	2
	Indian corn	40	...	27	10	23	2	20	5
	Pulses	28	2	26	8	22	6	14	...
Rajmehal	Rice	30	12	30	12	25	...	18	...
	Indian corn	45	...	25	...	20	...	30	...

Calcutta, 15th March 1867.

F. R. COCKERELL,
Legal Remembrancer, on Special Duty.

ABSTRACT OF PRICES IN

(ABRIDGED FROM MR.

DISTRICT.	Description of edible grain in use by the poorer classes.	Quantity of rice in seers of 80 tolahs procurable for one rupee 1865 and					
		September 1865.	October 1865.	November 1865.	December 1865.	January 1866.	February 1866.
Chumparun ...	Rice ...	15	15	15	11	12 to 12½	10½
Gya	Do. ...	7 to 10	7 to 10	9 to 15	9½ to 15	9 to 14	12½ to 13½
Patna	Do. ...	11½ to 12·3	10½ to 11	10½ to 12½	12 to 14	14 to 21	15 to 18
Sarun	Do. ...	11½	10	7½ to 13	9 to 14½	9 to 14	10 to 13½
Shahabad... ...	Do. ...	.....	.....	12 to 13½	12½ to 13½	12½ to 13½	12 to 14
Tirhoot	Do. ...	9 to 14	9 to 14	9 to 13	9 to 14	9 to 15	8 to 14

ABSTRACT OF PRICES IN THE

(ABRIDGED FROM MR.

DISTRICTS.	Description of edible grain in use by the poorer classes.	Quantity of rice in seers of 80 tolahs procurable for one rupee 1865 and					
		September 1865.	October 1865.	November 1865.	December 1865.	January 1866.	February 1866.
Bhaugulpore ...	Rice ...	16½	13½	11½	11½	15	13½
Monghyr... ...	Do. ...	12 to 15	10 to 11	10½ to 15	9½ to 13	10 to 13	8 to 11
Purneah	Do. ...	12 to 15	10 to 11	10½ to 15	9½ to 13	10 to 13	8 to 11
Southal Pergunnahs.							
Deoghur	Do. ...	.....	14	.....	.....	16	13
Doomka	Do. ...	.....	.....	.....	.....	16½	15½
Godda	Do. ...	20	15	18	18	18	18
Pakour	Do. ...	16 to 17	16	13 to 14	12 to 16	12½ to 13	15 to 16
Rajmehal... ...	Do. ...	26	26	26	18 to 20	12 to 18	12 to 16

THE PATNA DIVISION—1865-66.

COCKERELL'S REPORT.)

at the different grain bazars throughout the district during the period between September November 1866.

March 1866.	April 1866.	May 1866.	June 1866.	July 1866.	August 1866.	September 1866.	October 1866.	November 1866.
10½	9½	9½	8½	8½	6¾	12½	16½	18½
10½ to 13	9¾ to 10½	8 to 10	7½ to 9¾	7¾ to 9½	6½ to 8	8½ to 9½	9 to 10	9 to 13
15 to 18	12 to 12½	11½ to 12	10 to 10½	9½ to 11	11 to 12½	11¾ to 12	9¾ to 13	13 to 17½
7 to 13½	7 to 12½	7 to 11¾	7 to 10½	6¾ to 10	7 to 10	12½	13	14
12 to 13½	9 to 11¾	10 to 10½	8¾ to 10	9 to 10	9 to 12	10½ to 14	14 to 14½	18 to 18½
9 to 13	8 to 10	7 to 9	7 to 9	6 to 7	5 to 7	7 to 10	8 to 9	9 to 14

BHAUGULPORE DIVISION—1865-66.

COCKERELL'S REPORT.)

at the different grain bazars throughout the district during the period between September November 1866.

March 1866.	April. 1866.	May 1866.	June 1866.	July 1866.	August 1866.	September 1866.	October 1866.	November 1866.
13½	12	11½	10	8½	8½	8¾	10	12½
8 to 10½	8 to 9	8 to 9	7 to 8	7 to 7½	7 to 7½	7 to 7½	7 to 8½	8½ to 9
8 to 10½	8 to 9	8 to 9	7 to 8	7 to 7½	7 to 7½	7 to 7½	7 to 8½	8½ to 9
13	11	10	9½	7½	6½	7	8	17
12½	12	11	9	8	6½	7 to 9	8 to 9	18½ to 21
15	14	10	8	8	6½	6	8	12
14 to 16	10½ to 11	10 to 11	9½ to 10	8 to 10	7 to 9½	9 to 11	10 to 14	18 to 20
10 to 13	9 to 11	9 to 10	8 to 9	8 to 9½	7 to 8	8 to 10	8 to 10	11 to 16

Detail of prices in the Patna and Bhaugulpore Divisions, 1865-66.

(From Mr. Cockerell's Report).

Districts.	Description of edible grain in use by the poorer classes.	Quantity of grain procurable for one Rupee at the different Grain Bazars throughout the District during the period between September 1865 and November 1866.																													
		Sept. 1865.		Oct. 1865.		Nov. 1865.		Dec. 1865.		Jan. 1866.		Feb. 1866.		Mar. 1866.		April 1866.		May 1866.		June 1866.		July 1866.		Aug. 1866.		Sep. 1866.		Oct. 1866.		Nov. 1866.	
		Highest.	To lowest.	Highest.	To lowest.	Highest.	To lowest.	Highest.	To lowest.	Highest.	To lowest.	Highest.	To lowest.	Highest.	To lowest.	Highest.	To lowest.	Highest.	To lowest.	Highest.	To lowest.	Highest.	To lowest.	Highest.	To lowest.	Highest.	To lowest.	Highest.	To lowest.	Highest.	To lowest.
Patna Division.																															
Chumparun ...	Rice	15	15	15	15	15	15	11	11	12½	12	10½	10½	10½	10½	9½	9½	9½	9½	8½	8½	8½	8½	6½	6½	12½	12½	16½	16½	18½	18½
	Indian-corn ...	15	15	15	15	13	13	13	13	12	12	11½	11½	11	11	11	11	11	11	9	9	23	23	24	24	24	24	24	24	26	26
	Pulses ...	13½	13½	14½	14½	10	7	9½	7	8	6½	7½	5½	7	6	7	6	7	6	8	6	8½	7	7½	7	7½	6½	11	7½	16	7½
Gya	Rice	10	7	10	7	15	9	15	9½	14	9	13½	12½	13	10½	10½	9½	10	8	9½	7½	9½	7½	8	6½	9½	8½	10	9	13	9
	Indian-corn ...	16	13	13	11	15	12	16	13	16	13	14½	13	13	13	12½	16	13	15½	12½	13	11	13½	10	13½	8½	20	12½	19	14	20	17
	Pulses ...	13½	12½	11½	10	14½	11	14½	11	13	10½	16	13	15	15	17	14	13	12½	11½	11	11	10½	10½	10	12	10	13½	10½	15	13½
	Gram	13	13	11	11	11	11	12	12	12	12	11	11	11	11	11	11	12	12	10½	10½	10	10	9½	9½	10½	10½	11	11	14½	14½
Patna	Rice	12·8	11½	11	10½	12½	10½	14	12	21	14	18	15	18	15	12½	12	12	11½	10½	10	11	9½	12½	11	12	11½	13	9½	17½	13
	Gram	16	16	12½	12½	11½	11½	13	12	15	10	14	10½	14	11	18½	14½	14	12½	13	10	13	10	12½	10	16½	12½	18	14	17½	13
	Pulses ...	16	11	13½	8½	13	9½	15	8½	15	8	15	8½	18	9½	18½	10½	10	10	12½	10½	12½	9½	11½	9½	13½	10	13½	9½	16½	9½
	Indian-corn ...	14	14	15	15	15	15	15	15	15	15	15	15	18	18	14	14	14	14	12	12	12	12	16	16	16	16	14	14	16	16
Sarun	Rice	11½	11½	10	10	13	7½	14½	9	14	9	13½	10	13½	7	12½	7	11½	7	10½	7	10	6½	10	7	12½	12½	13	13	14	14
	Indian-corn ...	16	16	15	15	16	15	16	15½	16½	15	15½	14½	17½	16	15½	14	14	12	14½	12	13½	11½	11	10	25	25	23	23	25	25
	Pulses ...	...	...	...	...	12	10½	12½	11	11½	10	11	10½	14	10	14	9	13	10	12	9	11½	9	9½	8	13	13	13	13	15½	15½
Shahadabad ...	Rice	...	...	...	...	13½	12	13½	12½	13½	12½	14	12	13½	12	11½	9	10½	10	10	8½	10	9	12	9	14	10½	14½	14	18½	18
	Pulses ...	...	...	...	...	11	10	11½	9½	11½	9½	13	10½	14	9	14	12	14	11	11½	11½	11½	11	10	10	12	9½	11	10½	14	10½
	Indian-corn ...	...	...	...	...	14½	10½	15½	11	14½	11	15	12½	18	15	16	15½	16	13	...	...	13	13	...	...	18	13	14	14	20	20
Tirhoot	Rice	14	9	14	9	13	9	14	9	15	9	14	8	13	9	10	8	9	7	9	7	7	6	7	5	10	7	9	8	14	9
	Indian-corn ...	15	15	15	15	14	14	16	16	18	18	13	13	15	15	13	13	11	11	9	9	9	9	9	9	10	10	20	20	20	20
	Pulses ...	13	11	13	10	12	10	14	11	11	10	13	9	14	10	13	11	10	8	10	8	8	8	7	7	15	10	12	11	9	9
Bhaugulpore Division.																															
Bhaugulpore ...	Rice	16½	16½	13½	13½	11½	11½	11½	11½	15	15	13½	13½	13½	13½	12	12	11½	11½	10	10	8½	8½	8½	8½	8½	8½	10	10	12½	12½
	Indian-corn ...	19½	19½	19	19	16	16	15	15	15	15	16	16	16	16	15	15	15	15	15	15	16	16	...	...	22	22	22	22	22	22
	Pulses ...	15	15	12½	12½	12½	12½	11	11	13½	15½	12	12	12½	12½	12½	12½	12	12	11	11	8½	8½	8½	8½	8½	8½	10	10	10	10

Monghyr	Rice ...	15	12	11	10	15	10½	13	9½	13	10	11	8	10½	8	9	8	9	8	8	7	7½	7	7½	7	7½	7	8½	7	9	8½
	Pulses ...	12½	8	10	8	12	7½	13	8	14	9	12½	8½	15	8½	12	8½	12	9	12	9	10	8½	9½	8	10	9	11	10	11	9
	Indian-corn ...	20	20	16	16	14	14	17	13½	17	12½	17	12½	17	13	15	13	15	13	15	12	14	10	13	11	30	20	22	16	35	20
Purneah	Rice ...	14	13	12	10	15	9	18	8	17	16	18	16	13	12	12	11	12	11	11	10	9	8	8	7½	16	9	12	7½	17	8
	Gram ...	12	12	12	12	12	12	7	7	11	11	12	12	11	11	16	16	13	13	13	13	10	10	10	10	8	8	10	10	10	10
	Pulses ...	20	11	13	8	12	8	14	6½	14	8	16	10	15	12	13	12	10	8	10	8	9	7	8	7	8	7	8	7	8	7
SONTHAL PERGUNNAHS.																															
Deoghur	Rice ...	...	...	14	14	...	...	...	...	16	16	13	13	13	13	11	11	10	10	9½	9½	7½	7½	6½	6½	7	7	8	8	17	17
	Pulses ...	...	...	12	12	...	...	...	...	20	20	14	14	14	14	11	11	10	10	10	10	8	8	7	7	8½	8½	9	9	9	9
	Indian-corn ...	...	...	20	20	...	...	...	...	18	18	16	16	16	16	14	14	13	13	11	11	10	10	10	10	16	16	18	18	24	24
Doomka	Rice ...	...	...	...	...	...	...	...	...	16½	16½	15½	15½	12½	12½	12	12	11	11	9	9	8	8	6½	6½	9	7	9	8	21	18½
	Indian-corn ...	...	...	...	...	...	...	...	...	19½	19½	19½	19½	16	16	14	14	12	12	12½	12½	10	10	...	...	32	20	32	32	30	20
Godda	Rice ...	20	20	18	18	18	18	18	18	18	18	18	18	15	15	14	14	10	10	8	8	8	8	6½	6½	6	6	8	8	12	12
	Indian-corn ...	30	30	30	30	20	20	18	18	18	18	18	18	16	16	14	14	12	12	11	11	10	10	8	8	20	20	25	25	30	30
	Pulses ...	20	20	16	16	16	16	16	16	14	14	14	14	12	12	10	10	9	9	7	7	6	6	6	6	6	6	7	7	10	10
Pakour	Rice ...	17	16	16	16	14	13	16	12	13	12½	16	15	16	14	11	10½	11	10	10	9½	10	8	9½	7	11	9	14	10	20	18
	Pulses ...	16	15	16	16	13	12	12	12	15	11	18	12	20	12	14	12	14	10	14	12	10	7	8	8	13	8	13	10	15	11
	Indian-corn ...	22	20	20	20	20	20	20	20	22	21	22	20	20	16	15	15	14	14	10	10	10	10	10	10	12	12	14	14	15	15
Rajmehal	Rice ...	26	26	26	26	26	26	20	18	18	12	16	12	13	10	11	9	10	9	9	8	9	8	8	7	10	8	10	8	16	11
	Indian-corn ...	30	30	30	30	30	30	25	25	20	18	28	16	20	16	20	20	20	20	16	16	8½	7	12	11½	30	30	25	25	20	20
	Pulses ...	21	21	21	21	21	21	16	16	12	8	11	8	11	7	12	7	10	7	10	7	9	8	8	7	9	8	9	8	10	8

N. B.—Under the head of pulses a variety of small grains are included, the different kinds of which most commonly used by the people necessarily vary in the several districts, hence a greater range of prices is observable in this class of grain than in the others which are quoted in this statement.

BENGAL 1866.

Compiled by Mr. Knight.

Course of Prices during the period of greatest pressure in each District of Bengal, 1866. (*Quantities per rupee.*)

Division.	District.	Period of greatest pressure.	Srs.	Highest price.	Srs.	Average of 10 years. Srs.
Burdwan ...	Burdwan	June to October ...	7¾ to 9	August	7¾	23·6
	Bancoorah ...	„ to September ...	6 to 7½	Ditto	6	25·5
	Beerbhoom ...	„ to October ...	8 to 9½	July	8	23
	Midnapore... ...	May to September ...	6 to 9	August	6	24·7
	Hooghly	June to October ...	7 to 9½	July	7	19½
	Howrah	Ditto ...	8 to 10	Ditto	8	18·6
Presidency	24-Pergunnahs ...	June to October ..	7 to 10	August	7	16·8
	Nuddea	„ and July ...	8 to 9¼	July	8	19
	Jessore	Ditto ...	8 to 9	Ditto	8	18·5
Rajshahye	Moorshedabad ...	June to September ...	8 to 9	July to September	8	21·8
	Dinagepore ...	July to „ ...	11 to 11½	September ...	11	26
	Maldah	April to October ...	10 to 11½	July	10	29·7
	Rajshahye... ...	August to „ ...	9 to 12	September ...	9	21·2
	Rungpore	July to September ...	10 to 11½	Ditto	10	23·7
	Bograh	„ to October ...	10 to 11	August	10	26·7
	Pubna	May to „ ...	9½ to 11½	June	9½	22·6
Cooch Behar.	Darjeeling... ...	March to October ...	7 to 8	October	7	11
	Julpigoree.					
	Cooch Behar.					
Dacca ...	Dacca	June to September ...	10 to 10½	September ...	10	24
	Furreedpore ...	„ to October ...	8½ to 9½	Ditto	8½	29
	Backergunge ...	„ to „ ...	8½ to 11	October	8½	20
	Mymensing ...	August and September	8½	August	8½	23
	Sylhet	April to October ...	8 to 11½	June	8	25
	Cachar	May to „ ...	4½ to 9	Ditto	4½	23·6
Chittagong	Chittagong ...	September and October	11 to 13	September ...	11	21·9
	Noakhully.					
	Tipperah	May to October ...	11 to 14	August	11	24
	Hill Tracts.					
	Hill Tipperah.					
Patna ...	Patna	April to October ...	8½ to 11	August	8½	28
	Gya	May to „ ...	7½ to 10	Ditto	7½	23·8
	Shahabad	April to September ...	7½ to 10½	Ditto	7½	19
	Tirhoot	„ to October ...	8 to 9½	Ditto	8	19·6
	Sarun	June to August ...	9½ to 11	Ditto	9½	17·9
	Chumparun ..	April to „ ...	6½ to 9	Ditto	6½	17
Bhaugulpore.	Monghyr	April to October ...	7½ to 10	July	7½	23·5
	Bhaugulpore ...	June to „ ...	8 to 10	July, August, September ...	8	18·8
	Purneah	April to „ ...	8 to 12	August	8	25
	Sonthal Pergunnahs	Ditto	7½ to 10	Ditto	7½	20
Orissa ...	Cuttack	April to October ...	4½ to 8	June and July ...	4½	24·5
	Poree	February to „ ...	5 to 9½	June, July, August	5	22
	Balasore	April to „ ...	5½ to 9½	August	5½	28·8
Chota Nagpore.	Hazareebaugh ...	May to October ...	6½ to 9	August	6½	18·6
	Lohardugga ..	July to September ...	8 to 10½	Ditto	8	19
	Singbhoom ...	June to October ...	5 to 10	Ditto	5	30·6
	Manbhoom ...	Ditto ...	4 to 8	Ditto	4	17·8
Assam ...	Goalpara	June to October ...	8 to 10½	August	8	22
	Kamroop	July to „ ...	9½ to 1.	Ditto	9½	15
	Durrung	„ to September ...	7 to 8	Ditto	7	12
	Nowgong	February to „ ...	7 to 8	September ...	7	15·7
	Seebsangor ..	March to October ...	8 to 10	August	8	18·6
	Luckimpore ..	„ to September..	5 to 8	July and August	5	14
	Naga Hills.					
	Khasi and Jynteah Hills	September	5½	September ...	5½	7·8
	Garo Hills.					

IMPORTATION OF FOOD-GRAIN BY GOVERNMENT.

"288. *The details of the relief operations will be shown in the district narratives, but as, owing to the peculiar features of this famine, everything else is wholly subordinate to the supply of rice by sea, which formed the exact limit of the relief afforded, we may here briefly summarise what was done.* *IT MAY ALMOST BE SAID THAT EVERY MAUND OF RICE LANDED* [*in Orissa*] *FROM JUNE TO OCTOBER* [1866] *SAVED A LIFE, WHETHER IT WAS SOLD, GIVEN AWAY, OR STOLEN.*"—*Orissa Enquiry Commissioners, I.*, 288.

IMPORTATION OF FOOD-GRAIN BY GOVERNMENT.

IMPORT AND TRANSPORT.

(Mr. Girdlestone, paras. 162, 163.)

162. **The State cannot on the spur of the moment find money enough to feed the Famine-stricken.**—But, it may be urged, it is the business of Government, in time of extraordinary pressure, to take care that its subjects shall not starve; and if the question is merely one of money, it is comparatively easy to take such precautions as shall ensure his daily meal to every deserving person during the period of want. At first sight nothing seems simpler, but a few figures will reveal the impracticability of such a course. If grain is on the spot, it must be purchased at the sellers' price, or if brought from a region of plenty, the cost of carriage will leave little to compensate Government for having transferred its custom to a distant market. Let us suppose a season of scarcity, in which Government has to provide food for five millions* of persons, who either have not grain in their neighbourhood, or cannot afford the current prices of the market. Let us take the highest average of the inferior grains in 1860-61 as the rate at which Government must pay for its supplies, and let us reckon that one seer a day suffices for a man, a woman, and a child. Such a multitude will require (omitting fractions 1,666,666 seers a day, or 49,999,980 seers a month for consumption. The cost to Government would be Rs. 37,03,702 a month, or Rs. 4,50,61,440 a year,—a sum which exceeds the land revenue† of the North-Western Provinces by nearly 52 lakhs.

163. **Nor on an emergency can the State import food enough.**—It ought henceforth to be fairly within the competence of Government to arrest a local famine such as that which desolated Bundelcund in 1834. But if once drought should extend over so wide an area as the famine tracts of 1837-38 and 1860-61, I very much doubt whether anything short of rain would release the lower classes from their destitution. Meanwhile, as the country must undergo a period of distress, it becomes necessary to consider how Government can best help its subjects. I have shown how impossible it is for the State to find money enough to buy grain, even if grain exists on the spot. I now propose

* Five millions constitute, according to Colonel Baird Smith, the population of the worst localities in the last two great famines.

† On May 1st, 1867, the land revenue of the North-Western Provinces was estimated at Rs. 3,98,63,633 annually.

to set forth the difficulties attendant on importation.—243⅛ lbs. per head per annum is the average famine allowance, and as such I make it my basis for calculating what would be wanted to feed the inhabitants of a famine tract in time of drought, and what would be the cost of importing grain to make up for the shortcomings of the local harvests. The population of the famine tract in 1860-61 was about 13 millions. This number of mouths would therefore require, on the lowest scale compatible with existence, some 1,367,560 tons. The produce raised from canal lands (almost all of which were situated in the tract) was 8,264,320* maunds or 295,154 tons. The extent of ground within the area of distress irrigated by wells, permanent and temporary, was about 1½ millions of acres, and the produce, assuming the proportion to be the same to acreage as on the canal lands, would be about 667,000 tons.† By adding these items together, and deducting their sum from the amount of gain required, it appears that there was less by about 405,406 tons than would keep the people alive during the year. Mr. John Strachey, in the note‡ from which I quote below, estimates the cost of carriage at two annas per ton per mile in time of famine. According to this calculation, the deficit of 1860-61 would have entailed an expenditure of Rs. 50,675 for every mile of its transit. If ever the links are made which shall connect all our isolated canals, it is probable that the cost of transporting food will be much diminished. Water-carriage is always cheap compared to railway rates, and there is practically no limit to the use which may be made of it in case of emergency.

TRANSPORT.

Minor communications to be kept open. Excessive migration deprecated. (Mr. Girdlestone.)

During the continuance of a famine, and especially of one which has its origin in scarcity and not in high prices, free communication between one place and another is most essential. This matter has hitherto never been sufficiently attended to, and though there has

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* I calculate roughly 80lbs. to a maund.

† I do not take into account the partial crops in the Doab due to rain in this year, as I am arguing now concerning the effect of a total drought.

‡ The cost of transport, which is always enormous, becomes in time of famine greatly increased by the difficulty and expense of obtaining supplies of food for cattle. In ordinary times the average cost of transport in this part of the North-Western Provinces is calculated to be about one anna and eight pie per ton per mile.* At the present time this rate must probably be increased to at least two annas. It is easy to understand how hopeless it is under such circumstances to expect that the importations of food in time of actual famine can be anything but insufficient. Thus, to give an illustration, the five millions of people inhabiting Rohilcund certainly require for their consumption a supply of at least 800,000 tons of grain every year. To import even a tenth part of this quantity appears almost impossible. The mere cost of transport in bringing 80,000 tons of grain a distance of only 200 miles would not be less than 20 lakhs of rupees. According to Mr. Well's Traffic Tables, the average total annuas imports into Rohilcund, including every branch of trade without exception, amount only to about 80,000 tons; so that, if every cart engaged in the trade of the province were employed in bringing food, not a tenth part of the quantity consumed in the year could be imported.—*See Note on Famines, Supplement to the "Gazette of India," Dec.* 21, 1867.

* See Mr. H. Well's Report on Rohilcund Railway.

often been difficulty* in deciding on what sort of work the destitute could be occupied with the greatest benefit to the State, the necessity of efficient country roads seems to have been overlooked in the eagerness to initiate especial relief works of great magnitude. It is very doubtful whether the congregation of large numbers at various centres is a wise course in time of famine. There is always the risk of sickness, epidemic, or a failure in the commissariat arrangements, and it is impossible to calculate the harm that may arise in a few days from any one of these causes. On the other hand, the more that men can be kept at their own houses, the better chance have the local authorities of ascertaining the amount of relief that will be wanted, and the better for the land when the drought is over, for labour must then be instant and plentiful. When men in sheer despair of subsisting at home begin to roam, there is no saying whither their steps will lead them, or where by their presence they may add to distress which it was hard enough to cope with successfully before the strangers arrived. It is not enough to trust to the railway, the grand trunk road, the navigable rivers, and the canals, for the distribution of supplies. From one and all of these the food should be carried off through a multiplicity of channels and by various means till it comes closer to the dwellings of the poor. The efforts of many of the applicants for relief should certainly be devoted to keeping up the roads which brings the grain nearer to their doors, so that there might be no yielding of embankments, no breaking down of bridges, no wearing out of metal, and consequently no block in the traffic at the critical moment. In the event of another famine, if merely the imperial and district metalled roads of the North-West were kept in a thorough state of repair, it would then be seen how much labour might be employed advantageously to the State, and profitably to the interests of the husbandman.

Private Enterprise.

NORTH-WEST PROVINCES, 1860-61.—COLONEL BAIRD SMITH.

22. The demand for capital to carry on these extensive transactions [grain] in both branches of trade was excessive. Its position as the terminus of the railway, as the centre on which the Ganges Canal, the Grand Trunk Road, the main road from Oude, and the main road from Bundelkhund converge, gave to Cawnpore an important prominence in the operations, and there I obtained much of the information on which my ultimate conclusions were founded. I ascertained on questionable authority that the offer of double the usual rate of discount on bills drawn upon Calcutta failed altogether in procuring cash for them, that the spirit of speculation in grain was by no means limited to the corn

* It would be a wise plan to have a list of works carefully prepared in every district, so that in case of famine it might be clear how the starving should be employed. The list might include a scheme for a canal, or a series of dams in ravines, or a set of ducts from jheels. The object would be to have each possible undertaking well defined on paper, so that at the critical period valuable time should not be consumed in discussing what was to be done. There would be little or no difficulty in making rough surveys, estimates, and plans of that works projected; and copies of such papers should be deposited with the Government, so that it might be thoroughly aware of its districts' wants. [This suggestion which originated with the Famine Enquiry Commissioners, Orissa, had been carried out in Bengal during 1872.—J. G.]

merchants, but pervaded every class of society; that European gentlemen had invested largely in it; that every small merchant and every small farmer who could get a few hundred maunds together by credit or purchase made his modest speculation in grain. In a word, and comparing small things with great, the excitement was of the same type as that due to South Sea schemes or railway manias, and from some indications since given I am by no means sure that the parallel will stop at the mere excitement and universality of the spirit. If good rains should remove all dread of continued drought, some of the heaviest speculators are not unlikely to find they have been carried too far. But they have staked largely and boldly on a continuance of existing high prices, and the issue remains to be seen. It is to the state of things thus described, however, to the complete absorption for the time being of all available capital, and all available means of transport in the local grain trade, and to the wide area over which the spirit of speculation in grain spread, that I am disposed to attribute that sudden check in the imports of Manchester goods from Calcutta which had arrested attention some months prior to this inquiry being set on foot.

PRIVATE ENTERPRISE.

N.-W. P., 1861.—Orissa Enquiry Commissioners.

Cart traffic in North-Western Provinces, 1860-61.

The famine in the North-Western Provinces in 1861 cannot be compared in respect of the intensity which it actually reached with either of those which we have been contrasting. Colonel Smith indeed supposes the natural calamity in 1860 to have been nearly as great as in 1837-38, although he does not estimate the failure of the crops in 1860-61 to have been by any means absolute and total throughout the distressed country. The high prices which occurred in 1860-61 in the early part of the season were relieved by enormous and most energetic private importations. The gentleman who was then Commissioner of Delhi tells the President that the Grand Trunk Road was said to have been worn out in 15 days by the enormous use of it, and the President himself saw the railway stations between Allahabad and Cawnpore blocked up with grain awaiting transport, and every cart, bullock, camel, donkey, in short every means of conveyance available in the country in active use to transport grain from Oudh. Public works were early undertaken on a great scale under special arrangements to make them expressly available to the starving, and public subscriptions flowed in with such liberality that the overplus remained of which so valuable use was made in the famine on which we now report.

SALES.

Differential prices (according to supposed degree of personal indigence) not approved.

Orissa Famine Enquiry Commissioners, III. Para. 81.

In case it should again be necessary for Government to import food into any province, our opinion is that experience shows that it is better that it should be sold to the public at market rates only, and that no attempt should be made to sell at different rates to different

people according to the degree of their ability. Large importations will of course lower the market rate, and so doubly benefit the people. By market rate we mean, it should be well understood, the highest price which the grain, sold freely, will fetch, not that it should be kept back till purchasers are found at any particular rate. Any assistance to be given to those who are not objects of unreserved charity had better be given in the form of money, or any other way, leaving them to buy food at the ordinary rates. To the starving, food must of course be given gratuitously, and for the public laborers it must be provided in such a way as best suits the circumstances of each case.

RULES AND ACCOUNTS FOR THE IMPORT, TRANSPORT, AND SALE OF GRAIN.

Orissa, 1866.

From D. J. McNeile, Esq., Collector, on special duty at Cuttack, to the Collector of Balasore and other Collectors,—(No. $\frac{16}{1394}$, dated the 26th July 1866.)

Forwarding amended Rules for Depôts, &c.

By the Commissioner's direction I have the honor to forward, for your guidance, amended rules for the management of the grain trade now carried on in your district on behalf of Government. To these rules are appended forms of account, and an amended form of weekly statement No. 1 required under previous orders for transmission to the Board of Revenue.

The Commissioner desires me to communicate to you the following remarks in connection with these rules:—

1*st.*—The rules prescribe, you will observe, the system on which grain is to be issued, and expended from the Government stores, and from them only. The operations of the Relief Committee of your district are in no way affected by them. A separate communication will shortly put you in possession of the Commissioner's views on the subject of those operations and of his wishes in regard to the forms of account to be adopted in future in conducting them.

2*nd.*—Your special attention is requested to rule 7. The principle to be observed in fixing the rate at which the Government retail sales shall be made, is that that rate should fall below the rate previously current in the bazar only to the extent in which justified by the actual increase in the total quantity of grain in the market caused by the Government importations. Where those importations supply a small portion of the whole market stock, the bazar traders will command, and should be allowed to command, the market. Where a large portion of the market stock is the property of Government, you will yourself command the market, and the rate fixed by you will inevitably become the bazar rate. You should in such cases be careful to lower that rate gradually, and not suddenly, so as to avoid the risk of driving private traders out of the market. If the rate be suddenly lowered, retail traders who have purchased their stock-in-hand from wholesale dealers at the previous wholesale rates, will find themselves unable to dispose of that stock except at a great sacrifice. But if the reduction of rate be

made gradually, they will have time to get rid, without loss, of their stock-in-hand, and then procure fresh supplies at the lower prices at which the general reduction in rates, to which the present operations will tend, will oblige the wholesale dealers to sell. The object of encouraging the retail traders, so far as it can be done compatibly with the main object of relieving the public distress, must be kept steadily in view; for it must not be overlooked that the present interference on the part of Government is of an exceptional and temporary character, and that serious consequences will ensue if, when the bazar rates shall have been reduced to their normal figures, the Government shall find itself unable to withdraw from the trade without producing a recurrence of the previous high prices and consequent distress.

3*rd*.—In reference to Rules 8, 9, 10, the Commissioner observes that only small quantities of grain should be made over at a time to traders employed as Government retail agents; for if a large consignment be made over at once to any such trader, it may be found necessary to alter the rate of sale before it is all expended—an alteration which, as the whole consignment will have been paid for in cash at one and the same rate, would lead to much confusion, and give facilities for dishonesty.

4*th*.—The separate set of rules forwarded for the use of officers in charge of Government depôts will be found to tally exactly with the general rules. They have been prepared in a separate form for simplicity and clearness sake.

RULES FOR THE GUIDANCE OF OFFICERS IN CHARGE OF GOVERNMENT DEPOTS.

1. All grain stored in the depôt will remain in the custody of the officer appointed for the purpose. The officer so appointed will act under the orders of the Collector of the district, or of the nearest sub-divisional officer, as the Collector may direct.

2. The officer in charge shall disburse grain *in unopened bags* to the Relief Committee and the various Government Departments upon a written order from the Collector or the sub-divisional officer, as the case may be,—and on no other authority whatsoever.

3. The officer in charge shall disburse grain *by weight* to traders or other private individuals upon written order from the Collector or Sub-divisional officer,—and on no other authority whatsoever.

4. The officer in charge shall, whenever he may be so directed by the Collector or sub-divisional officer, and not otherwise, open shops at or near his depôt for the sale of grain *by weight* to the public. Such sales shall be made at the rate per maund, and in the quantities which may be prescribed by the Collector or sub-divisional officer.

5. The depôt will be kept open daily, (Sundays excepted) during the hours which may be prescribed by the Collector or sub divisional officer.

6. The officer in charge shall keep the following books:—

A.—*Stock Account.*

B.—*Ledger of sales to the Public under rules* 3 *&* 4.

These accounts will shew the total daily amount (or value, as the case may be) of the debits and credits under each separate head (*vide* specimen entries in forms of account appended). The books will be balanced weekly shewing the results of the week's transactions from Monday to Saturday inclusive.

7. All grain stored at the depôt will be credited and all disbursements debited in Account Book A. All retail sales under Rule 4 will be recorded in Account Book B. In the same book will be debited all disbursements under Rule 3.*

Whenever such disbursements under Rule 3 are entered in Account Book B, the "price" figures borne upon the orders upon which the disbursements are made shall be entered in Column 6.

8. The officer in charge will carefully file all orders from the Collector or sub-divisional officer presented to and honored by him; keeping the file of traders' orders executed under Rule 3 separate from the file of orders in favor of the Government Departments and Relief Committee.

9. The officer in charge will disburse no cash on any account out of the money received by him by the sale of grain. He will remit the whole of the amount to the sudder or sub-divisional treasury.

10. The officer in charge will send in his cash balance, as shewn by column 5 of Account Book B, to the sudder or sub-divisional treasury daily or weekly, as he may be directed by the Collector or sub-divisional officer. For every such remittance he will obtain a receipt from the Treasurer. He will carefully file these receipts.

11. The officer in charge will send in every Monday to the Collector or sub-divisional officer certified *verbatim* copies of the whole entries in his accounts for the preceding week.

12. If the Collector or sub-divisional officer shall see fit to make any cash disbursement on any account through the officer in charge of the depôt, he shall supply him with special funds for the purpose, and the depôt officer shall furnish separate and distinct accounts of the expenditure of all such sums.

T. E. RAVENSHAW,
Offg. Commissioner.

RULES FOR THE MANAGEMENT OF THE GOVERNMENT GRAIN TRADE.

1. All grain imported by Government will be held by the Collector for disposal under the restrictions hereinafter laid down. It will be stored under his direction in *Golahs* either at the sudder station or at one or more places in the interior.

2. *Golahs* established at the sudder station will remain under the immediate supervision of the Collector. *Golahs* established in the interior will, at the discretion of the Collector, be kept under his own supervision, or placed under the orders of the officer in charge of the nearest Government treasury. The *Golahs* at each depôt whether at the Sudder station or in the interior, will be placed, under the aforesaid supervision, in the charge of an officer specially appointed for the purpose.

[* The forms of account are not given in the volume from which these rules are extracted.

3. The Collector will sell grain from the depôts under his own immediate supervision in unopened bags to the various Government Departments at the full cost price, calculating the price of each bag according to its nominal weight, viz., two maunds. These sales shall be made for cash only. The Relief Committee shall be supplied with grain free of charge.

4. The Collector shall effect the disbursements provided for in the last preceding rule by means of orders upon the officers in charge of the depôts. Such orders shall be granted by him, in the case of cash transactions, upon previous payment of cash into his treasury, and upon such previous payment only. Orders shall be granted to the Relief Committee on application from their Secretary, or other recognised agent. The orders shall be drawn up in the forms appended.

5. Any Government Department purchasing grain under the two last preceding rules, shall remove the purchased grain from the depôt at its own expense. Grain made over to the Relief Committee will be carried at the expense of the Collector to the place where they may elect to take delivery of it.

6. The officer in charge of each depôt under the immediate superintendence of the Collector, may be directed by the Collector to open one or more shops at or in the neighbourhood of his depôt for the sale of grain by retail to the public.

7. Such retail sales shall be made at the rate prescribed by the Collector, which rate shall be as a rule the rate current for grain of the same quality in the bazar. In no case shall it be fixed at a lower figure than one seer in the rupee cheaper than the market rate. It is to be distinctly understood that this is a maximum difference, and that the bazar traders are to be undersold to this extent only in cases when it is beyond doubt that they are in possession of grain, for which they are demanding usurious rates from the public. Grain shall be sold under this rule to each customer at the discretion of the Collector in any quantities up to half a maund in weight, or three rupees in value per diem—the standard of weight or of value being respectively adopted under the Collector's orders as may be found more convenient. The limit imposed by the rule must under no circumstances be exceeded.

8. The Collector shall be at liberty, in any case in which he may deem it expedient, to employ private traders as Government retail agents, either at the sudder station or in the interior. Whenever any such trader may be so employed, the grain shall be supplied to him by the Collector by order upon one of the depôts, as provided in Rule 4 above. The Collector shall fix, on the same principle as that laid down in the last preceding rule, the retail price at which the trader shall sell to the public, and shall make over the grain to the trader for cash at the same price, allowing him a small commission to be deducted from the cash payment made by him in purchase of the grain. Any trader purchasing grain under this rule shall be bound to provide the means of conveying it from the depôt to the place of public sale; but the costs of carriage shall be paid by the Collector at the standard rates, the amount being deducted with the trader's commission from the cash payment made by him.

9. The trader shall give in a written agreement upon stamped paper, binding him under specified penalty to sell the grain to the public, in quantities not exceeding per diem one rupee in value to each customer at the rate prescribed by the Collector, and to keep a notice exposed in front of his shop to inform the public of the rate and quantity aforesaid.

10. Grain disbursed to retail sale agents under the last two rules shall be made over to them by the officer in charge of the depôt according to its *actual* weight.

11. The depôts will be open daily, Sundays excepted, from A.M. to P.M.

12. The officer in charge of the depôt shall keep the following account books:—

(A.) Stock Account.

(B.) Ledger of retail sales to the public.

These accounts will shew the total daily amount (or value, as the case may be) of the debits and credits under each separate head (*vide* specimen entries in forms of account appended),* and the books will be balanced weekly, shewing the results of the week's transactions from Monday to Saturday inclusive.

13. All grain stored at the depôt will be credited, and all disbursements thereof debited, in account book A. Disbursements of grain to the Relief Committee will be debited in account book A *only*. Account book B will constitute the record of all detail sales made under Rules 6 and 7. In it will also be debited all disbursements made under orders from the Collector under Rules 8, 9, 10,—such disbursements being regarded as retail sales.

14. The officer in charge of the depôt will carefully file all orders from the Collector presented to and honoured by him, keeping the file of traders' orders separate from that of orders in favor of the Government Departments and Relief Committee.

15. The officer in charge of the depôt will disburse no cash on any account of the money received by him by the sale of grain. He will remit the whole amount, as shewn in column 5 of his sale ledger, to the treasury.

16. The officer in charge of any depôt sufficiently near to the sudder station will send in every evening before P. M. to the treasury the whole of the cash received by him during the day, and will obtain a receipt for the amount from the treasurer. He will carefully file these receipts.

17. The officer in charge of such a depôt shall, at the commencement of each week, either lay his accounts in original before the Collector, or shall supply him with certified *verbatim* copies of the whole entries therein for the preceding week, as he may be directed by the Collector.

18. The officer in charge of any depôt situated at a distance from the sudder station shall forward to the Collector every Monday morning the certified copies prescribed by the last preceding section, and shall submit therewith the whole of his cash balance for the preceding week, as shewn by the entries in column 5 of his sale ledger.

19. The Collector, in communication with the Superintendent of Police, will make arrangements for the safe custody of the grain and

[* The forms of account are not given in the volume from which these extracts are taken.]

cash kept at the several depôts, and of all consignments of grain and cash in transit in those cases in which the transit expenses are under the above rules to be defrayed by the Collector.

20. All expenses of landing, carriage, and storing whether at the coast or in the interior, all costs of establishment, and all other miscellaneous expenses, will be paid by the Collector. The Collector will open an account in his treasury under the name of the Importation Fund Account, to which he will debit all such disbursements. To the same fund will be credited all cash receipts from sale of grain, whether paid by the purchasers into the treasury direct, or remitted by the officers in charge of the depôts. All remittances from the Relief Committee of cash, the proceeds of sales effected by the Committee, will also be credited in full to the Importation Fund.

21. Rules 3 to 20 will be applicable to all depôts placed under the orders of sub-divisional officers, the words "the officer in charge of the treasury" being substituted for "the Collector." Sub-divisional officers will be further guided by the two rules next following.

22. The officer in charge of the treasury will, not later than Wednesday in each week, prepare a statement in each of the forms A and B, embodying the totals of the columns in that form submitted by all the officers in charge of depôts under his orders, and will forward these two statements to the Collector, with a certificate that the total amount shewn in column 5 of statements B has been actually received in his treasury, and credited to his Importation Fund Account.

23. The Sub-divisional officer will make disbursements under Rule 20 only with the previous sanction of the Collector. He will supply the Collector, together with the statements prescribed in the last preceding rules, with a memorandum shewing the total receipts and disbursements credited and debited in his Importation Fund Account up to the previous Saturday inclusive. He will at the same time submit a contingent bill of the expenditure.

24. The Collector will prepare from the abstract statements of account submitted by the sub-divisional officers, and from the accounts submitted by the officers in charge of depôts kept under his own supervision, the weekly Statement No. 1 required by the Commissioner for transmission to the Board. This statement will be despatched not later than one week subsequent to the week to which it refers (*vide* Form of Statement No. 1 appended.)

25. At the same time the Collector will forward to the Commissioner a memorandum shewing the total receipts and disbursements in the district on account of the Importation Fund up to the previous Saturday inclusive.

26. The Collector shall at the commencement of each month submit, for the Commissioner's sanction, a contingent bill of all the expenditure incurred during the preceding month, and on receipt of that sanction adjust the items in the usual way, both in his own office and those of the sub-divisional officers.

(Sd.) T. E. RAVENSHAW,

Offg. Commissioner.

IMPORT OF RICE BY SEA—ORISSA, 1867.

Mr. Hobhouse, President of Calcutta Relief Committee, page IX Sq.

We have not before us the result of all the operations under this head, but in Appendices IX to XIII [of the original report] will be found a detail of all that was done by the Government in this department from the beginning of operations until the 27th June 1867, and the following is a concise summary of the same.

By a glance at the sketch map which accompanies this report, it will be seen that the Government import store depôts extended from Ruknadaipore in the Balasore district north, to Koosenpersad near the Chilka Lake in the district of Pooree south.

Between these two points there is a sea-board, say, 240 miles in length; and in connection with this sea-board nineteen places were selected as import store depôts for rice. A detail of these places will be found in Appendix XIII [of the original report], and they will also be found noted in the map by a particular index.

The points of debarkation were, until the south-west monsoon set in, the Dhamrah river, False Point, the Davee river, and Poorce; but False Point was the only place at which debarkations could be carried out throughout the year.

Operations may be said to have commenced about the end of December 1866; and between that time and the end of May 1867, 7,76,390 maunds of rice had been imported and stored in the province of Orissa. It had been originally contemplated to import only 4,00,000 maunds, but this quantity was raised at first to 6,00,000, and then to 8,00,000 maunds. As matters turned out, the quantity at first estimated for would have been sufficient, but it was yet evidently a wise precaution to import the larger quantity, for there is no doubt that but for the finest rice-harvest known for years the whole of the maximum quantity of rice imported would have been consumed.

The rates at which the rice was sold from the Government depôts stood for long at Rs. 3-4 the maund for cleaned rice, and 2-12 for Burmah rice; but at the season when the fate of the province, so far as the supply of food was concerned, hung on the balance, the above prices were reduced to Rs. 2-8 and 1-12 per maund in certain localities; and then when the harvest was secure the prices had to be lowered, and that not in special localities, but everywhere, in order to getting rid of the stocks in hand.

We can give no particulars of the expenditure on these import transactions, because, as we have pointed out before, they were not conducted by our Committee but by the Government.

IMPORT, TRANSPORT, AND SALE.

Mr. Schalch's Rules in Orissa, 1867.

ACCOUNTS.—It is of the greatest importance that the Board should be kept informed of the receipts and disbursements of the stock of grain at the several import and sale golahs. To prevent delay in the submission of this information, the stock accounts should be kept entirely distinct from all accounts connected with the receipts and expenditure of money. If this be done, there should be no difficulty in preparing at any moment the accounts of mere stock. The stock accounts should consist of—

2. *Statement No.* I.—*Importation Fund Stock Account.*

3. This statement is to be used for import golahs, including import golahs which are also sale golahs.

4. A similar statement, to be numbered Statement II, is to be used for golahs which are only sale golahs; the only difference between it and Statement I will be the substitution of the word "sale" for "import."

5 Columns 13 and 14 will be used only for grain delivered to Relief Committees for gratuitous distribution or for sales by them at low rates.

6. Returns Nos. 1 and 2 should be prepared at each of the import and sale golahs on the 1st and 16th of each month, and forwarded direct to the Collector, who, after testing and correcting them, if necessary, will forward copies of them without delay to the Commissioner. From the Commissioner's Office an aggregate statement, in each form, for the division must be forwarded with the least possible delay to the Board.

[Afterwards these stock returns were made monthly instead of fortnightly.]

7. The special attention of the Commissioner is requested to prevent delay in the preparation and submission of these two stock accounts.

8. *N. B.*—By import golah, is intended any golah into which Government rice is imported direct, whether rice be sold there or not; by Government sale golah, any Government golah into which rice is transported for sale from an important golah.

9. MONEY ACCOUNTS.—The accounts of the existing Importation Fund and of the Charitable Distribution Fund were closed at the end of the year 1866.

10. From the 1st January 1867 a new account has been opened, called the "Importation Fund," to which will be credited all receipts for the sale of imported rice, whether to the Relief Committee or to others, such sales being made for the present at a uniform rate of Rs. 3-4 per Calcutta maund.

Per contrâ all charges connected with the importation and sale operations will be charged to that fund, such as purchase of rice, freight, landing, storage, &c., &c.

11. To enable the Board to keep the Collectors in funds, an estimate should be prepared, and despatched by them on the 20th of each month, of their probable requirements for the following month, and the Collectors will either be placed in funds, or authorized to meet the demands up to the amount of that estimate.

12. It is not intended that the Collectors should be tied down to the exact sum of their estimate, but if they have reason to believe, during the course of the month, that their estimate will prove insufficient, an emergent estimate for the excess should be forwarded.

13. A monthly abstract cash account of the Importation Fund should be submitted for the province, shewing separately, for each district, the receipts and expenditure; the first under the three heads of "receipts by sale of grain," sub-divided into 'cash' and 'transfer;' second, "miscellaneous receipts;" and third, "inefficient balances," and the latter under the heads of—

Landing charges.
Inland transport charges.
Depôts' construction and repairs.
Establishments.
Miscellaneous expenditure, not coming under the former heads.
Inefficient balances.

14. It will not be necessary for the Collectors to give the items separately for each golah, but there should be a separate total for each district. On the back should be a memorandum for each head of the receipts and disbursements, bringing forward former aggregate receipts and expenditure, so as to shew total receipts and expenditure up to date of the return.

15. The monthly abstract cash account for the province will be the only form of account required to be submitted to the Board for the Importation Fund; but the Commissioner will issue the necessary orders for keeping the proper subsidiary accounts at the several golahs for submission to him. [The subsidiary accounts were a register of stock receipts and a register of stock issues in manuscript, to be kept in day-book form under the Collector's instructions. No special forms were printed; different golahs had to keep different accounts according to the nature of the business to be done, which necessarily was not uniform.]

N.B.—All weight to be given in *Calcutta* weight—80 tolahs to the seer.

16. The cash accounts of the Importation Fund (for the very early submission of which to the Board there is not the same urgent necessity as in the case of the stock accounts) should be first forwarded to the Collector, with the necessary vouchers, by the Golah Superintendents.

17. The Collector, after carefully examining, checking, and, if necessary, correcting these accounts, will forward them to the Commissioner, in the form of an abstract cash account, accompanied by schedules giving the necessary details; and in the Commissioner's Office the aggregate abstract cash account for the Board will be prepared.

18. The district monthly cash account of the Importation Fund should be prepared from separate daily cash-book, which should be kept

in the Importation Fund Department, shewing in detail all receipts and disbursements on account of that Fund; only the aggregate receipts and expenditure being shewn in the Treasury accounts.

19. It is expected that the district abstract cash account for any one month will be received by the Commissioner by the 20th of the following month, and by the board on the 1st of the succeeding month.

20. Full time has thus been given to allow of the accurate preparation of these returns, and in no case must further delay be allowed; and to ensure the attainment of this object, the Commissioner and the Collectors may be allowed the establishment noted below, to be employed solely for the preparation of these accounts, whose salaries can be charged to the Importation Fund.

21. *For Commissioner.*

1 Head Clerk at	..	..	Rs.	120
1 Writer „	..	..	„	60
1 Ditto „	..	..	„	50
1 Mohurrir „	..	..	„	30
8 Duftry „	..	..	„	6
5 Chuprassees „	Rs. 6 each	..	„	30
			Rs.	296

For Collector, Pooree.

1 Accountant at	..	..	Rs.	100
1 Writer „	..	..	„	70
2 Mohurrirs „	Rs. 30 each	..	„	60
2 Chuprassees „ „	6 „	..	„	12
			Rs.	242

For Collector, Cuttack.

1 Accountant at	..	..	Rs.	100
1 Writer „	..	..	„	70
1 Ditto „	..	..	„	30
2 Mohurrirs „	Rs. 30 each	..	„	60
2 Chuprassees „ „	6 „	..	„	12
			Rs.	272

For Assistant Collector, Bhudruck.

1 Accountant at	..	..	Rs.	100
2 Mohurrirs „	Rs. 30 each	..	„	60
2 Chuprassees „ „	6 „	..	„	12
			Rs.	172

22. These establishments are in supersession of all previous establishments allowed for the Account Department, whether with the Commissioner or Collectors.

23. SALE OF RICE.—For the present sales of rice will be at the rate of Rs. 3-4 per maund of 80 tolahs to the seer for Calcutta rice, and at Rs. 2-12 per maund for the Burmah rice landed up to the end

of February, and will be conducted solely at the Government import and sale golahs. But the Relief Department also was allowed to sell on its own account the grain taken over from the Import Department. [See Rules 26-30.] Should the latter prove not sufficiently numerous, the Commissioner can establish such additional sale golahs with the requisite establishments, reporting his proceeding to the Board. The rate for the Burmah rice, to be landed subsequent to February, will be hereafter fixed on ascertaining the quality.

24. GRATUITOUS DISTRIBUTION AND SALES AT LOW RATES.—These operations will be conducted by the Special Famine Commissioner, under orders of the Calcutta Famine and Orphan Relief Committee, in consultation with the several local Relief Committees.

All charges connected with the rice after it is delivered to the Relief Committee, will fall upon the Gratuitous Distribution Fund.

26. SALE OF GRAIN AT FAMINE RELIEF DEPÔTS.—The Collector of each district will be furnished on the 20th of each month, under orders of the Special Famine Commissioner, with a statement shewing the probable amount of rice required for the succeeding month at *each* of the relief depôts, with the name of the sale depôt from which the rice is to be purchased, a copy of each of these statements will be forwarded to the Commissioner, who will prepare from them, and forward to the Board not later than the 25th, an aggregate statement for the province.

27. The Collector will, on receipt of the statement, authorise the Superintendent of each sale depôt to deliver to the mohurrirs of relief depôts rice up to the extent specified in the statement.

28. For all rice so delivered, the Superintendent of the sale golahs will take from the mohurrir of the relief depôt a receipt in due form, which he will the same day forward to the Collector, after making the necessary debit and credit in his account.

29. The Collector, on these receipts coming to hand, will credit to the Importation Fund the value of the rice, by a transfer from any sum which may be in his accounts, to the credit of the Special Famine Commissioner.

30. To prevent the possibility of stock at the relief depôts running short, owing to delay in attending to these forms, the Superintendent of the sale golahs may supply rice in anticipation or excess of the authority granted under paragraph 27, on a written requisition of the mohurrir of a relief depôt, stating that such supply is absolutely necessary to prevent the stoppage of relief; and such requisition is to be forwarded to the Collector, together with the receipts for the rice delivered thereon.

31. In the Board's Office there must be—

I.—Register of shipping containing—

(*a*) Consecutive number of ships taken up.
(*b*) Name and burden of vessels, in tons or maunds, and name of master.
(*c*) Port to which despatched.
(*d*) Date of despatch.
(*e*) Amount of cargo shipped in bags and in maunds.
(*f*) Date of arrival at port.
(*g*) Date of clearance at port.
(*h*) Amount of cargo delivered in bags and in maunds.

32. Entries (*a*) to (*e*) will be filled up by returns from Master-Attendant, and (*f*), (*g*), and (*h*), from returns from Superintendent of the import golah to which the vessel is consigned.

33. II.—Cash-book and ledger of receipts and disbursements; and from this and from the Commissioner's and Master-Attendant's cash-accounts—

34. III.—A monthly cash account should be prepared, shewing aggregate importation receipts and expenses.

35. For the receipts of grain by the Master-Attendant, a cheque-book A should be kept, shewing—

1.—Date.
2.—Amount of grain received.
3.—Value as per contract.
4.—Name of person to be paid.

36. The counterpart should be kept in the Master-Attendant's Office, and the cheque made over to the payee, who would, on presentation of it at the Board's Office, receive payment for the amount and give a receipt on the back of the cheque, which would be kept as a voucher.

37. A similar cheque-book B, but in triplicate, should be kept of vessels despatched, containing particulars of columns 1 to 5 of Register of Shipping; one part to be kept in Master-Attendant's Office, one sent to the Board to fill in the corresponding columns of the Register of Shipping, and the third given to the master of the ship for delivery to the Superintendent of the import golahs at which he has to make delivery. The Superintendent should also keep a book C, in triplicate, containing particulars (*f*), (*g*), and (*h*) of the Register. The first would be for record, the second for delivery to the master of the ship, on presentation of which to the Master-Attendant, the latter will note the amount of freight due on the back, and the amount will be paid on presentation to the Secretary, Board of Revenue, and the third for despatch by post to Board direct.

38. The Master-Attendant should forward to the Board on each Monday forenoon, a memorandum shewing the probable number and tonnage of vessels to be despatched during the week, in Form D.

D.

Estimate of despatch of Grain for week ending

Name of Port.	Aggregate number and tonnage of vessels to be despatched to each port.	Remarks.

39. On the same day should be forwarded a memorandum of the deliveries of rice by the contractor, in the following form :—

DATE.	Amount of previous deliveries.	Amount of deliveries of the week up to date.	Total.	Amount deliverable up to date by contract.	Deficiency.	REMARKS.

40. The Master-Attendant should submit a monthly cash account, containing receipts, that is, remittances from Board, and miscellaneous, and expenditure under the heads of—

Establishment.
Storage.
Shipping.
Miscellaneous.

41. The headings of Statements 1, 2, 3, 4, and 5, and form of cheque for vessels discharged (C), should be sent to Commissioner of Cuttack, to be there printed; the Register of Shipping and cheque-books of grain received (A), and vessels despatched (B), and estimate (D), should be printed in Calcutta.

42. CONTRACT FOR RICE.—A contract has been effected for the delivery of four lakhs of maunds at the Government dock-yard in Calcutta between the 15th instant and the 15th of March. In addition to this quantity, there will be available from the 1st instant the balances of grain in store in the province on that date, the cargoes of the *Armenian* from Calcutta, the *Tynemouth* from Rangoon, and the *T. A. Gibbs* from Chittagong, and the despatches from Calcutta by the *Guide*. The whole will probably aggregate a total of nearly five lakhs of maunds.

43. TESTING WEIGHMENTS, RECEIPTS, AND DESPATCH OF RICE.—The Master-Attendant has been supplied with musters of the rice that has been contracted for, and will test the quality as deliveries are made.

44. The Master-Attendant will receive and test the rice, and ship in accordance with the instructions contained under the head of accounts.

45. RECEIPTS AND WEIGHMENT OF RICE AT IMPORT AND SALE GOLAHS.—Hitherto the imported rice has been received by bags only. From the commencement of the year, all rice received at, and despatched from, the import and sale golahs must be weighed and the bags marked accordingly, and the careful attention of the local authorities must be given to check and prevent all attempts at abstraction or theft.

ORISSA IMPORT

[Orissa, 1867—Stock.]

Abstract Statement No.

IMPORTATION FUND.
STOCK ACCOUNT OF SALE GOLAHS.

Abstract Statement No.

Stock Account showing the Receipts and Disbursements, and the remaining of for

DISTRICTS.	Name of Golahs.	Place whence grain has been received during the month.	RECEIPTS.					
			Amount received during the month by tale and weight. A		Balance previously in hand as per last Statement. B		Total Receipts. C	
			Number of bags.	Aggregate weight. Mds.	Number of bags.	Aggregate weight. Mds.	Number of bags.	Aggregate weight. Mds.
1	2	3	4	5	6	7	8	9

Explanatory Notes.

A+B=C

D+E+F=G

C−G−H

Detail of quantities transferred to other Golahs.

	Number of bags.	Aggregate weight.
(1) ... ... Golah.		
(2) ... ... „		
(3) ... ... „		
(4) ... ... „		
(5) ... ... „		
(6) ... ... „		
(7) ... ... „		

FORMS.—I STOCK.

1 for Import Golahs.

2 for Sale Golahs.

balances at the Government *Golah* *in the District*
the month of

Issues during the month.						Aggregate of issues during the month.		Stock remaining in Golah.		Remarks.
Transferred to Sale Golahs as per detailed Statement below. D		Sold to the public for cash. E		Sold to Relief Committee. F		G		H		
Number of bags.	Aggregate weight. Mds.	Number of bags.	Aggregate weight. Mds.	Number of bags.	Aggregate weight. Mds.	Number of bags.	Aggregate weight. Mds.	Number of bags.	Aggregate weight. Mds.	
10	11	12	13	14	15	16	17	18	19	20

Note on Columns D, E, F.

The Golah Superintendent will have to render to the District Collector the Transferees' Receipts as his vouchers to support the statement of rice issued. These vouchers are not, however, required for the Commissioner.

ORISSA IMPORT FORMS II.—CASH.

[Orissa, 1867—Cash.]

Abstract Cash Account of Importation Fund *for the Golah in the District of* , *during the month of*

[Manuscript Forms.]

RECEIPTS.	Rs.	A.	P.	EXPENDITURE.	Rs.	A.	P.
1. Balance from last month ...				1. Landing charges			
2. Inefficient balance				2. Inland transport charges ...			
3. Total (of 1 and 2)				3. Depôt construction and repairs.			
4. Receipts by sale of grain for cash.				4. Establishment...			
5. Miscellaneous receipts ...				5. Miscellaneous			
				6. Total			
				7. Inefficient balance			
				8. Cash balance			
Grand Total ...				Grand Total (to agree with col. 6, Receipt side).			

IMPORT, TRANSPORT, AND SALE.

Further transport operations carried on by the District Relief Committees. Orissa, 1867.

(*From Mr. Hobhouse's Report.* X.)

If Appendix XIII and the map are again consulted, it will be found that there were 82 sub-depôts maintained by the [Relief] Committee; that of these all but three were fed from the Government import and sale depôts, and that the maximum distance of any one sub-depôt from the nearest Government depôt was only 32 miles; that the minimum distance (where they were not in close proximity) was one mile, and the average distance about 10 miles; and as these sub-depôts were created in every place where there was any distress apparent, they could, on the one hand, be readily supplied from the Government depôts, and they were on the other hand sufficiently within the reach of all who were under any necessity to have recourse to them.

In storing these depôts, the ordinary means of country carriage, whether in carts, or on bullock pack, or in boats, was resorted to; the carriers receiving a percentage on all rice delivered, and being held responsible for any short weight.

There was for a short time a stoppage, or rather a shortness of carriage, by reason of the roads becoming impassable for carts, and of the carriage-bullocks being required for purposes of cultivation; but the stoppage was not for long, nor did it give rise to any inconvenience, and generally it may be said that the carriage service was a success.

SALES OF RICE BY RELIEF DEPARTMENT.

[Orissa, 1867.—From Mr. Hobhouse's Report.]

It has already been pointed out that these sales were carried on principally at certain relief depôts; but it was found that even to these depôts, carefully selected though they were, so as never on an average to be more than 6 to 10 miles apart, it was not in the power of all requiring relief to resort; deep khals prevented some, and household duties, or other obstacles to movement, prevented others. So the relief agents, on their tours for village relief, took rice to sell. Rice was also sold in markets on market days. Boats were employed conveying rice for sale along the banks of rivers, and at villages isolated by deep khals or floods; and shops were established in connection with the depôts at any places at which distress for the means of food appeared to prevail.

The rates at which the rice was sold was at first Rs. 3-4 per maund for Calcutta, and Rs. 2-12 for Burmah rice; and for some time, perhaps for the months of March, April, and May, bazar rates continued everywhere below these rates; but in June, rice became everywhere—from South Balasore north to the Chilka Lake south—more scarce, and the demands on the depôts heavier, whilst yet the class of persons requiring food was in a worse position than before as to any means for acquiring it.

The sale rates, therefore, in the most distressed parts had to be lowered in the month of June, from Rs. 2-8 to Rs. 3 for Calcutta, and Rs. 2 for Burmah rice; and at these rates sales were generally brisk for the next three months, *viz.*, for June, July, and August.

Imports and stocks were necessarily in the meanwhile made to keep pace with sales; and then, when in the end of August, the demands on the depôts suddenly ceased, it became once again necessary to reduce sale prices; but on this occasion, not distress, but the advisability of disposing of surplus stock was the cause of the reduction.

The object of the sales was the relief of actual distress; but in carrying out that object, the Committee had to be careful to interfere as little as might be with private trade, and so a constant watch had to be kept on the movements of that trade, and the result in every marked instance shewed that a combination of the dealers and not any principle of demand and supply, regulated that trade. In Pooree, for instance, in the month of May, when rice was becoming cheaper by reason of imports from Ganjam, the traders combined and temporarily

checked the imports in order to running up the prices. And again in Cuttack, in the same month, the dealers made a similar combination with a similar end in view. And again in Khoordah, in the same month, the ryots for a time held up their stocks in the hope of a bad harvest and better prices hereafter, and then eventually readily accepted the depôt rates as those that should rule their own sales. So in the end it was found that, the object being to prevent distress, the best way of attaining to that object by sales of rice was to discover what the applicants for relief could afford to give, and at what prices they could purchase elsewhere, and to regulate the depôt rates accordingly. The result would seem to shew that due discretion was exercised as well in fixing the rates originally as in reducing them afterwards; for it was not until the ordinary resources of the country were evidently failing, that the rates were reduced at all, and notwithstanding further reductions of rates, these demands ceased altogether, so soon as these ordinary resources again came into play.

There is one other notable feature in these sales of rice. The maximum quantity permitted to be sold to any one person was at first three seers. The object of this was to secure in the purchasers those persons, and those only, individually requiring relief,—to exclude in fact every retail dealer. But it was found in practice that one person, by employing various agents, could, and that many persons did, evade the rule; and curiously enough the evasion had reason for its basis. It was found that the maximum of three seers obliged applicants to be repeatedly coming, often over long distances and troublesome obstacles, for relief, at great labor to themselves, and to the great inconvenience and neglect of their families and occupations at home; and that this was the true reason of the evasion. The maximum was then raised to six seers per person.

A statement shewing the result of sales of rice will be found at page 26, Statement V, of Mr. Molony's Report. [Cited here.]

V.

Orissa, 1867.—*Statement showing the results of sales of rice by the Relief Department only, exclusive of the Import and Sale Department.*

Districts.	Period embraced.	Amount of rice sold.	Value of such at the current Government rate.	Value at which sold.	Loss.	Expended on Sales.			Total cost to Committee of sales.	Percentage of cost per md. sold.	Remarks
						Establishment.	Buildings.	Transport.			
		~~Rs.~~ Md.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P	Rs. As. P.	Rs. As P.	Rs. As. P.	
Cuttack	March 1867 to April 1868	1,06,400	2,87,690 0 0	260,334 0 3	27,356 0 0	16,237 15 10	1,818 0 0	9,779 3 5	55,191 13 3	0 8 3	
Pooree ...	March 1867 to Dec. 1868	13,064	32,583 9 2½	28,822 6 9½	3,761 2 5	5,641 0 0	1,199 9 5	2,163 14 3	12,765 10 1	0 15 8	[Explanation given in district Statement]
Balasore	March 1867 to April 1868	16,105	51,405 8 6	32,859 14 0¾	18,545 10 5¼	1,663 6 9	912 12 2	1,420 11 8	22,542 9 0$\frac{28}{80}$	1 6 4	
	Total ...	1.35,569	3,71,679 1 8½	3,22,016 5 1¼	49,662 12 10½	23,542 6 7	3,930 5 7	13,363 13 4	90,500 0 4$\frac{28}{80}$		

Import operations from Agra to Ajmere, 1869.

(MR. HENVEY'S REPORT, pp. 92-96.)

Importation of grain by Government.

The first proposition to import came from the Commissioner of Ajmere, who, on the 2nd September, 1868, stated that if rain did not fall before the period for sowing the rubbee, Government must be prepared to contend with a famine extending over at least twelve months, and it would be necessary to organize a special train for the supply of grain. On the 11th September, the Commissioner again wrote that grain must be imported for distribution as wages if actual scarcity should ensue, and solicited a grant of Rs. 10,000 for the purchase of corn, which was not to be given out in charity, but to be sold in lots to the poor, or to be paid away as wages on the public works. The Government of the North-Western Provinces at once sanctioned by telegram Rs. 10,000, or more if needed, and indicated the Doab markets as the best source of supply. On the 28th September, the Commissioner again telegraphed that prospects in Ajmere and Rajpootana were still more gloomy. At Ajmere the price of wheat was 8 seers and barley 9½ seers for the rupee. And on the 30th idem he informed Government that about Rs. 10,000 worth of grain had been ordered from Bhawulpore, Hissar, and Agra. At Ajmere tenders had been invited for 2,000 maunds, and grain associations had been established there and at Nusseerabad. Altogether supplies to the value of one lakh of rupees were coming. The reasons for these exceptional measures were explained to the Supreme Government. They were, that the harvest throughout Rajpootana had failed, and the failure was rendered more serious by the length and difficulty of roads to available markets; fears were entertained that Native speculation would not suffice to meet the emergency; and it was, therefore, necessary to provide against an absolute want of food. Before the end of the year, however, the Commissioner reported that, owing to the removal of obstructions in the way of trade by the Native Governments, he had not availed himself of the permission to purchase to the full extent of one lakh. The prices in the Ajmere bazar had been such as to yield an exceedingly small profit on the Government importations, thus showing that no unfair gains were realized by traders. Neither the Government grain nor that of the charitable associations had been sold, except some barley which was thought unlikely to keep. The proposal was renewed in the autumn of 1869. On 24th August, the Commissioner sent copies of telegrams that had passed between himself and the Deputy Commissioner. The question and reply were as follows, dated 20th August 1869:—

Necessity foreseen in September, 1868.

Government grant Rs. 10,000 for the purpose.

Grain associations at Ajmere and Nusseerabad.

Improved prospects at the end of the year 1868.

Renewal of the proposal in the autumn of 1869.

"Wheat 4⅞ seers. Will you sanction immediate purchase of Rs. 10,000 worth from Bhowanee and a further purchase of Rs. 20,000? No rain yet." Reply:—

"Buy Rs. 10,000 of grain. Write fully of the markets and carriage before buying more."

In submitting these papers, the Commissioner observed that there was every reason to fear that the stock of grain in Rajpootana was exceedingly small. The area of khureef sown would not average one-half of former seasons, and locusts were spread over an enormous tract of country. Government approved what had been done.

Commissioner's view of the situation.

Again, on the 1st September, the Commissioner wrote that wheat and bajra at Ajmere were at 4 seers, barley and jowar at 5 seers. Stocks were dangerously low. At Agra on the 21st August, 11 seers of wheat and 15 seers of barley were procurable for a rupee. There was a good metalled road from Agra, but carriage was scarce. He recommended that 8,000 maunds should be purchased at Agra, and that the grain should be conveyed by troops. He could not positively state that sufficient food did not exist, but the high prices ruling, could only be occasioned by failing stocks, and there was grave danger of a deficiency before the khureef ripened. Native States were behaving well, but Thakoors had thrown obstacles in the way of the grain-trade. Papers forwarded with this report showed that the men of the Mhairwarra Battalion were suffering from insufficient food. On the 10th September, telegrams were exchanged that notwithstanding a good fall of rain, the measure was absolutely urgent: and on the 11th of the same month, the Lieutenant-Governor telegraphed thus to Viceroy :—

Prices in September 1869.

Commissioner urges the purchase of 8,000 maunds from Agra.

The Lieutenant-Governor obtains the Viceroy's consent.

"Precedence. Colonel Keatinge and Deputy Commissioner urge purchase at Agra of 8,000 maunds wheat and barley to be conveyed under military and police escort to Ajmere for relief works, battalion, and retail sales. Price of wheat below 4 seers per rupee. Good harvest prospects not expected to improve market for some time. I consider proposed measures urgently required, and solicit sanction."

At the same time it was reported to the Government of India, that the local authorities found the utmost difficulty in procuring carriage, while private carriers were exposed to the exactions of Thakoors and petty chieftains. Wheat was selling at about 4 seers, and barley from 4 to 5½ seers per rupee. These prices the Commissioner ascribed to failing stores, though the Deputy Commissioner thought that there was ample grain in the country for four months. The market was difficult to gauge, and there was want of mercantile energy on the part of traders. Government had also to consider the condition of Marwar, where a strain even greater than in Ajmere had caused exportation and increasing scarcity.

The reply of the Viceroy was as follows :—

"Though I have doubt as to prudence of Government becoming a purchaser, still, as you say measure necessary to save life, I sanction."

Arrangements were then made for the purchase of grain at Agra and for an escort of Native troops and police.

From the above abstract of the correspondence, it will be seen that the object of Government was not to interfere with private trade, but to guard against the possibility of a total failure of food, which at one time seemed likely to arise from the isolation of Ajmere and the difficulty

The object of the Government explained.

of communication between the province and distant markets. It must be remembered that the people of this country are extremely cautious in their commercial dealings. At the best of times they are apt to hoard: and at this period of great distress, when the province was laid waste by drought, locusts, and pestilence—when crops perished, and beasts of burthen and draught were swept away in thousands—it was natural for the grain-merchants to withhold stores.

Opinions as to the urgency of the measure.

The Deputy Commissioner has stated his opinion that there was never an absolute scarcity of grain in his district, but he adds that no prices would tempt the dealers to part with their stocks till they found that the Government would prevent the rates rising higher by providing grain for public purposes. To this testimony may be added that of the Agent, Governor-General, who, in writing of the importation, said—

"The benefit of the measure was realized long before the grain reached its destination: the knowledge that it was *en route* put an end to all hoarding, if any existed, whilst the example of Government seemed to stimulate private enterprise."

Colonel Keatinge said elsewhere:—

"They (the measures) were the principal means by which public confidence was maintained, and it is my opinion that without them there would have been such a disorganisation of society as would have paralyzed private trade; and had private trade been suspended even for ten days, the result would have been terrible."

Regarded from a financial point of view the importation was decidedly unprofitable. Altogether 19,467 maunds were purchased on behalf of Government, at a total cost of Rs. 1,13,838-11-8. 12,492 maunds 38 seers 5 chittacks were sold at various points where pressure was most severe; 6,415 maunds 38 seers 7 chittacks were issued as supplies of food to the poor-houses and to the laborers employed on the civil relief works at Beaur, Todgurh, and Ajmere; 578 maunds 18 seers 4 chittacks were lost by wastage and other causes. The receipts were—

The importation in one sense unprofitable.

	Rs.	A.	P.
Proceeds of sale	55,299	13	2
Value of supplies issued ...	36,399	14	5
Premium on supply bills ...	34	14	0
Sale of dead-stock	682	6	9
Refunded camel-hire	1	0	0
	92,418	0	4
Loss ...	21,420	11	4
	1,13,838	11	8

The above loss, added to the value of supplies issued, gives a total of Rs. 57,820-9-9 as the net expense incurred by Government. Computing the quantity of grain required for the support of a man at 10 chittacks per diem, which was the usual rate at the poor-houses and relief works, the consignments of Government grain represented 1,245,912 rations, and were sufficient to maintain the whole population of the province for three days. This

Net loss to Government.

relief, though small, compared with what must have been done by private trade, was doubtless of sensible advantage in lightening the pressure on the market.

Causes of loss.

Several causes contributed to swell the charges and diminish the return. A table is given showing details of the despatches:—

Despatch.	Quantity.	Whence obtained.	Cost at centres of issue.	Cost at centres, expressed in seers per rupee.	Time when sold or issued as supply.	Amount of sale or value of supply.	Sale and supply price in seers per rupee.	Average market-rate at time of sale or supply.	Deficit.
			Rs.	S. C.		Rs.	S. C.	S. C.	Rs. A. P.
First ..	4,964	From Agra Commissariat and Ajmere contractors.	27,066	7 5	From 28th October 1868, to 4th March 1869.	22,406	8 13	7 7	4,659 10 7
Second	5,000	From Central Committee through Gyapershad, Mahajun, of Allahabad.	25,821	7 12	February 1869.	20,807	9 9	7 12	5,014 6 10
Third...	9,503	From Agra Commissariat and an Ajmere Seth.	60,951	6 4	From November 1869, to April 1870.	49,205	7 11	7 0	11,746 9 11
Total ...	19,467	.....	1,13,838	6 14	.....	92,418	8 6	7 6	21,420 11 4

Enormous cost of carriage.

In the first place, it must be observed that the cost of carriage was enormous. Gyapershad's consignment was delivered at Allahabad for Rs. 15,000, or at the rate of Rs. 3 per maund, equal to 13 seers 6 chittacks per rupee. The cost of carriage and other charges to the points of issue were not far short of Rs. 11,000. Again 8,008 maunds (part of the third despatch) were procured from the Commissariat at Agra for Rs. 32,648, or at the rate of 9 seers 13 chittacks per rupee. The carriage to Ajmere and other incidental expenditure raised the amount to Rs. 46,973-0-10, or 6 seers 14 chittacks per rupee at Ajmere, and as will be seen from the table, the value at the centres of issue was still higher. Secondly, large quantities of the second and third consign-

Large quantities weevil-eaten.

ments were found to be weevil-eaten. In both instances there was evidence to show that when despatched the grain was sound and good. Whether it was injured in the journey, or inferior grain substituted, it is impossible to say, but the consequence to Government was that much was lost, and much thrown into the market for what it would fetch, and sold at lower rates than would have been obtainable had it been possible to wait for favorable opportunities. It is noteworthy that the private grain fund arrangements were more successful in this respect, and the

grain supplied by the contractors of Ajmere is also said to have been excellent. Lastly, there was much wastage in transit. The allowance usually made for the journey from Agra to Ajmere is from 8 to 11 chittacks per maund: now the 8,008 maunds sent from Agra in September and October 1869 were found at Ajmere to be short by 345 maunds 32 chittacks, or at the rate of 1 seer 11 chittacks per maund. The bags were carefully weighed in the presence of the Agra Commissariat Officer, and there is no question but that at the time of despatch, the weight was complete. Unfortunately, however, no responsible agent accompanied the consignments from Agra. In the same way, a despatch of 767 maunds obtained from Agra in September 1868, was short by 2 seers per maund; and Gyapershad's 5,000 maunds were short by 1½ seer per maund. Altogether the loss in this direction is computed at about Rs. 2,000 in value.

There was great wastage in transit.

The grain fund associations at Ajmere and Nusseerabad co-operated with Government in keeping the markets supplied with food. The plan (said to be after the model of arrangements successfully conducted in the Bombay Presidency) simply was that benevolent persons should club together and subscribe capital for the purchase of grain, which should be sold at favorable rates to the poor. The following extract from a letter written by the Cantonment Magistrate of Nusseerabad on the 13th November 1868, gives a good description of the method pursued, and shows also that the object was rather to stimulate than interfere with native traders.

Private grain associations.

The plan.

The method pursued.

"By dint of talking, persuading, and affording interviews hourly to natives, I have induced every man with money to go into the grain trade, and also persuaded rich men to lend large sums to traders at moderate rates of interest to invest in grain. One man has lent Rs. 60,000 in the last two months and grain is now coming down from Agra very freely. Three natives came forward, and I formed them in a little grain company, and they are importing very largely: besides all this my *bunyahs* have taken the only two contracts yet advertised by Colonel Keatinge, *i.e.*, 2,000 maunds of wheat in each, so that our market is very active, and all going on well. All this does good; the people like to see supplies pour in."

The rules of the Ajmere and Nusseerabad Grain Club will be found at the end of this extract.

No fall in prices can be clearly ascribed to the Government importations, though the rates might have been still more extreme had not the people perceived that Government was determined to keep the markets supplied. In February 1869, when Gyapershad's consignment was sold, there was a slight fall of 3 chittacks per rupee, but this was probably due to the approach of the *rubbee* harvest. Again, in November 1869, when the 8,000 maunds from Agra arrived, grain had fallen from 4½ seers in September to 6 seers; but, as Colonel Brooke has pointed out, this was at a time when the carrying trade was reviving, and strings of 2,000 camels were met conveying enormous quantities of grain into the country. Of course, the revival of trade may have rendered interference on the part

Effect of the importation considered.

On prices.

On revival of trade.

of Government unnecessary; but this very revival was greatly facilitated by the measures taken to prevent failure of supplies. Traders who had closed their shops in alarm when the stagnation of the carrying trade took place, re-opened them in confidence.

Rules of the Ajmere Charitable Grain Club.

In consequence of the distress apprehended from the general failure of crops in the Ajmere district, a Charitable Grain Association has been formed for the purpose of supplying the poor with grain at the lowest possible rate.

The following rules have been adopted :—

I.—The grain to be procured from a distance, and to be sold by auction in lots of not more than one maund each.

II.—The sales to be held weekly on fixed days in the bazars to which the fund may extend its operations.

III.—At the option of the Committee, separate sales shall be held for women.

IV.—No subscriber to buy for his own use or for the use of his immediate family.

V.—With this exception, no restriction of any sort to be imposed on the class who are allowed to purchase.

VI.—A Committee of Management to be formed, which is to be instructed to expend the funds, so that no more than half the capital may be lost even in an unfavorable state of trade. If on closing the accounts there should be a profit left, it is to be expended on some work of charity to be determined upon by the general vote of the subscribers.

VII.—The lowest subscriptions to be received from any Government servant to be Rs. 200, and from any merchant Rs. 500.

Resolution for the formation, and rules for the guidance of, the Nusseerabad Equitable Grain Company.

That grain, though at famine prices, is being withheld on all sides, and the community is much disturbed by the rapid fluctuations of prices in the market.

That the present disconnected manner of distributing food to the poor by certain liberal-minded native residents must be highly unsatisfactory in case of any further distress caused by a further rise in prices, and it is therefore most desirable, as a preliminary measure, to form a Grain Company.

The object of this Company is, by a speedy and liberal expenditure of funds, to encourage all classes, and especially the industrious poor to perceive that no reasonable measures will be left untried to bring, into the market a plentiful supply of grain, which grain will be retailed to the poor at the most reasonable rates possible, under the direction of the President and members, and with the co-operation of chowdrees of mohullas. Feroze Shaw, Moonna Lall, and Benee Pershad, citizens of Nusseerabad, having offered to supply capital to any amount up to Rs. 50,000, their offer is accepted, and this sum will represent the total amount to be employed by the Company.

That on arrival, and until urgent distress be apparent, grain be retailed to the poor only at such rates as may seem expedient, leaving a small margin to cover expenses of carriage, storage, &c.

All measures of relief to be carried out through and with the co-operation of chowdrees of mohullas, by whose aid lists of needy persons and large families will be prepared, and grain retailed to them in due proportion at fixed periods, a week's supply being allowed at one time. Distribution agencies to be opened in the several mohullas at such times and in such manner as may seem most convenient.

IMPORT AND TRANSPORT.

Employment of Camels.

RAJPOOTANA, 1869-70.—COLONEL BROOKE, PARAS. 208-209.

The Rajpootana famine bore a strong resemblance to the Orissa famine in one particular; that for some months, though from a different cause, Rajpootana, like Orissa, was shut off from the receipt of supplies at the most critical period of the year. In Orissa, this arose from the impossibility of ships approaching the coast to unload during the monsoon months. In Rajpootana, the same result was produced by the utter failure of forage, the price ofwhich was in many places actually dearer than grain, so that no carts could travel nor could the pack bullocks of the Bunjaras, of which there are hundreds of thousands in Rajpootana and Central India, traverse the country. The result was the same. The sea in one case, and the want of grass in the other, isolated the famine tract from the rest of India. For some months during the progress of the calamity, there was one means of transport in Rajpootana which was not available in Orissa, viz., camels. These useful animals do not appear to have been utilized in Rajpootana as much as they might have been even during the period in which they could travel. The traders doubtless used vast numbers of camels in bringing grain from Hansi and Hissar on one side, and from Scinde on the other, but much more might have been done had there been an organized transport service of these useful animals. The agreements entered into by Colonel MacDonald, for the supply of the Deolee Bazar, mentioned in paragraph 155, and which agreements were taken over by the traders show, that if similar arrangements had been made on a large scale and in various directions, a much steadier and larger supply of grain would have been received into the country than was actually the case. The deputation of a single agent to Jeysulmere secured 12,80,000 maunds of grain, all of which came on camels. This was, perhaps, double the amount of what would have come otherwise fron that direction. This supply was the salvation of Marwar, and much of the grain even reached Ajmere. All the kafilas [caravans] employed by traders, however, ceased travelling during the rains, partly because no return loads of salt could be carried during the season, and partly because, agreeably to the time-honored custom of the country, camels are then turned out to graze. Some are employed in desert agriculture, it is true, but the number of these is comparatively few.

During the early part of the rainy season, organization would have been most useful, for though the objections to the ordinary use of camels during the rains are founded on common sense, yet in an extraordinary emergency, like the famine, when the first object was to save human life at all hazards, the employment of camels would have been exceptionally advantageous, food being procurable for them but for no other animals. The extra cost would have been met by the great rise in price, which always takes place during the rainy season, and which was unusually great in 1869, when a large portion of the country was threatened with actual dearth of all food. In September of that year panic everywhere existed: traders shut up their shops. People with money in their hands could not exchange it for grain, whilst in villages away from the marts, the result must have been more frightful, I venture to say, than we have any conception of. It was too late then to organize camel convoys, but had 20,000 or 30,000 of these animals been in regular employ, organized by officers, but employed by traders, a constant supply of grain to the capital of Rajpootana could have been maintained, and from Ajmere it would have found its way over the rest of the country.

Tonk, 1869.—Captain Blair cited in Rajpootana Administration Report.

Measures taken to import grain

By the end of September it was apparent that the stock of grain at Tonk and in the district was very low. Merchants, too, showed extraordinary backwardness in meeting the crisis by large importations, which were absolutely necessary to prevent starvation. Their action was checked by fear that grain convoys would be plundered in transit, and also from a dread that arbitrary rates might be fixed (a system finding favor with all Native Governments), causing them a loss on their ventures. Agents were therefore despatched to the surrounding Jeypore districts, with instructions to purchase freely on behalf of the State. Every assurance and encouragement was given to merchants to import, and guards were promised, should it be found that they were necessary. Import duty on cereals had been previously remitted; and on the 3rd of October a completely free grain trade was proclaimed.

6. The Agents despatched to the Jeypore districts quickly returned, having only succeeded in purchasing some Rs. 12,00 0 worth of cereals. They found that, in spite of the Maharaja's liberal measures, free trade in grain, with a famine impending, was so opposed to the understanding of local officials and of the people, that grain-holders were afraid to sell. Under the circumstances, since the territories of Gwalior, Kotah, Boondee, and Ulwur were all sealed, the markets of the North-Western Provinces were only left to us. Our agents were accordingly sent to Agra and Ferozepore Jhirka, with instructions to purchase and forward grain without delay, because it was feared that the great scarcity of fodder in Rajpootana would effectually, within a few months, close the road, except to camel carriage. Altogether 29,900 maunds of grain were purchased at the cost of Rs. 82,000, to which must be added

Rs. 58,000 for transit and other charges. It had been at first determined to purchase more than double this quantity, but it was found that merchants, so far from being discouraged by the State importing, accepted it as a guarantee that the import of grain was not likely to be attended with loss, and had redoubled their own exertions, rendering it practicable and desirable for the State to withdraw from further action. The total amount of Government and private grain imported has amounted to 158,385 maunds, of which 21,966 maunds have been subsequently exported. For the most part the grain was unescorted, and although thefts of grain were not unfrequent, as might indeed be expected, not one convoy was plundered. For this immunity from violence in such a season we are much indebted to His Highness of Jeypore, through whose territories the road chiefly passes. Had one case of pillage occurred the importation of grain would have been at once checked by thousands of maunds.

Bad faith of Agra Merchants. Repudiation of contracts after acceptance of earnest money.

7. I may be also here permitted to allude to the bad faith of the Agra merchants. There market was crowded with purchasers, and they were driving a splendid trade; yet, not content with honest profits, they have made themselves notorious throughout Rajpootana for the shameless manner in which they repudiated their engagements. By native custom the acceptance of earnest-money signifies that a bargain is finally concluded; but at Agra, if prices rose before the amount of grain stipulated could be weighed out, the sellers had no hesitation in declining to complete their contracts.

PRINCIPAL STATISTICS OF FORMER FAMINE.

Statistics of distress and of relief measures in North-West Provinces, 1860-61—summarised by Colonel Baird Smith.

29. I have now completed the descriptive section of this report, and have tried to convey to Government, as faithfully and accurately as my capacity permits, the general impressions I have received from the different aspects of the famine. I have endeavoured to define, in so far as the available materials would allow, its boundaries, and to indicate the causes of those broad contrasts that are to be fouud within them. The systems of relief in action have also been reviewed, and it has been shown that at about 100 separate centres not fewer than 80,000 helpless poor have been fed and otherwise relieved. As these crowds are being constantly changed by the passing onwards of many, at first helpless, to works, as they gained strength, and from other causes it is probable that at least 250,000 persons in all have felt the substantial benefits of this part of the relief system. It has further been shown, that through the agency of special works of relief, about 140,000 more have been supplied with the means of subsistence, and to this average number too, the succession of persons no doubt makes a sensible addition. By relief houses, relief works, and employment on ordinary public works, not fewer than half a million of the population must have benefited directly. The spontaneous relief sought in emigration has influenced nearly half a million more; and if account be taken of those tribes who have hitherto struggled on without accepting other relief than that from public demands on account of land revenue, the great body of sufferers can scarcely be less than from $1\frac{1}{4}$ to $1\frac{1}{2}$ millions.

The expenditure incurred in various forms, including among them the remissions of Government revenue which have been or will be granted, falls not much short of three-fourths of a million sterling.

The adequacy of the supplies of grain in the districts adjoining the famine tract, and in the tract itself, to meet any demand likely to be made upon them, has been adverted to, and attempts have finally been made to estimate approximately the losses caused to the proprietary communities in the bad sections of the tract by the influence of the drought. These have been estimated approximately at about three millions sterling.

MORTALITY.

North-Western Provinces, 1861.—From Mr. Girdlestone's Report.

141. **Impossibility of ascertaining the extent of the Mortality.**—It is out of the question to give any reliable account of the mortality which resulted from the famine. No general register of deaths was kept

at the time. and even if there had been such a record, the knowledge that it was framed amid confusion and panic would very much weaken its claim to accuracy. Isolated statements indeed have been made, and such as they are I will repeat two or three of them ; but I think that they must be received with caution. Thus in the Meerut District it is reported that 109 deaths had occurred up to January 22nd, and, later, Colonel Baird Smith was told that 7,000 persons had died previously to May from starvation ; but, as he remarks, "many among these are from other causes than actual starvation." The population of the district at this time was a little more than a million. To the returns of Mr. College, Collector of Boolundshuhur, he is inclined to give more credence, on account of the care with which they had been compiled The result which they show is a mortality of over 24,700, or about 3½ per cent. of the population. But even this statement, admittedly the best of a bad lot, depends on nothing more than oral testimony for its worth, and if this is the case it would be a mere waste of time to multiply examples. In this matter we must be content to know that excessive mortality* did ensue, but what was its amount even those who were living amid the suffering had no adequate means of estimating.

Finance, 1860-61.—*(From Mr. Girdlestone's Memoir.)*

145. Total Cost to Government of Special Relief Works.—I am more fortunate, however, in having returns as to the cost of the special relief works undertaken by Government. On this subject Colonel Baird Smith wrote in May 1861 :—

"The pecuniary burden has however been a heavy one on the State. It is estimated that the entire cost of special relief works, great and small, throughout both provinces, will not be less than about £250,000."

Now, according to the table which he himself gives of the persons employed daily in April on special works, it will be found on separating the items that about 59.000 persons were employed in the Punjab, and 84,500 in the North-Western Provinces. The entire outlay for the North-West under this head we now know to have been Rs. 9,14,294.† The Punjab works cost Rs. 3,25,106.‡ These two sums together make Rs. 12,39,400—rather less than half Colonel Baird Smith's estimate.

146. Total Loss to Government by remissions.—Again, after dealing with the question of loss in agricultural produce, Colonel Baird Smith writes :—

"The whole remissions of the Government revenue in aid of landed proprietors who have borne the loss just indicated (loss of produce and cattle) will amount altogether to about forty lakhs of rupees."

The following table shows that, for the North-Western Provinces, where the famine tract was larger, and the suffering proportionately more

* Sir Arthur Cotton estimates the mortality at 2,00,000 at the very least (see page 5 of "The Famine in India," a lecture delivered before the Social Science Congress in Manchester, October 12th, 1866).

† See Administration Report for 1861-62, paragraph 113.

‡ See Supplement to *Punjab Gazette* of 12th February 1862 paragraph 4

extensive than in the Punjab, the balances for the year of distress were rather less than 13¼ lakhs, or about 11 lakhs more than the balances in course of liquidation or adjustment in an ordinary year:—

District.	Land Revenue for 1860-61.	Collected.	Balance.	Portion of Balance Postponed.	
				Indefinitely.	For a period.
	Rs.	Rs.	Rs.	Rs.	Rs.
Saharunpore	10,93,066	8,73,766	2,19,300	1,39,442	400
Mozuffernugger	11,36,769	10,02,674	1,34,095	1,03,116	31,531
Meerut	17,85,176	15,54,054	2,31,122	61,983	1,69,139
Boolundshuhur	11,35,602	10,21,867	1,13,735	84,094	.....
Allygurh	18,32,750	17,54,455	78,295	2,815	17,672
Muttra	16,52,346	16,04,110	48,236	.....	16,336
Agra	16,16,502	14,46,892	1,69,610	1,22,595	.....
Mynpoory	11,30,853	10,24,432	1,06,421	64,453	3,097
Bijnour	11,93,302	10,41,105	1,52,197	.....	1,30,336
Moradabad	13,14,059	12,71,877	42,182	2,155	6,253
Budaon	9,23,579	8,94,471	29,108	.....	8,201
Total ...	1,48,14,004	1,34,89,703	13,24,301	5,80,658	3,82,965

Of this balance the Secretary to Government wrote in the Administration Report of 1861-62 it was expected that "above half will eventually be recovered, and the remainder will be remitted." I have traced the fate of these balances, and the following table shows that no more than Rs. 2,34,646 have so far been remitted:—

North-Western Provinces.—Revenue Balances on account of famine of 1860-61.

District.	Balance remitted.		Balance realized.
	Amount.	Under the Orders of Government.	
Saharunpore	37,149	1148A., 22nd February 1865.	This is not ascertainable either from Board's or Government Secretariat Records.
Mozuffernuggur	10,607	847A., 28th August 1865.	
Meerut	23,267*	1006A., 6th September 1862. 36A., 11th January 1864.	
Boolundshuhur	9,332*	972A., 30th August 1862.	
Allygurh	34,623	365A., 16th March 1863. 427A., 29th April 1864.	
Muttra	2,218	925A., 22nd August 1862.	
Agra	64,339	858A., 22nd July 1863.	
Mynpoory	11,561	1354A., 12th December 1862.	
Bijnour	22,518	972A., 30th August 1862.	
Moradabad	5,093	1302A., 8th December 1862. 1137A., 2nd October 1863.	
Budaon	13,944	991A., 19th October 1865. 688A., 15th August 1866.	
Total ...	2,34,646		

* Original remission was Rs. 11,891; of this Rs. 2,559 were realized before the Government order sanctioning the original remission was received by Collector.

In the Punjab the remissions amount to Rs. 6,74,526. Instead therefore of 40 lakhs, less than 9¼ have been relinquished by Government. I give these examples, not the least from a desire to detract from Colonel Baird Smith's labours, which were immense, but merely to show that his calculations cannot be accepted as conclusive in every instance. Were all his deductions correct, I should not hesitate to declare that the famine of 1861 was the greatest that the North-Western Provinces ever experienced; but honestly I believe some of his figures are open to dispute, and that the calamity which I am now describing, instead of being the heaviest, was the least severe of the four great ones which have devastated these provinces within the last century.

147. **Condition of the Abkaree.**—The collections on account of Abkaree are invariably a good means of testing the prosperity of the people. The consumption of excisable commodities rises in times of plenty, and diminishes under the anticipation or pressure of want. It is not surprising therefore that there should have been a falling off in 1860-61 in the Meerut, Agra, and Rohilcund Divisions, but nothing could more significantly prove the local character of the famine than the increased receipts in the other parts of the North-West. So great indeed was the rise in the Allahabad and Benares Divisions that the accounts of the year only show a loss of some Rs. 70,000 in all. The following abstract contains the demands and collections for 1859-60 and 1860-61 :—

	Demands.		Collections.	
	1859-60.	1860-61.	1859-60.	1860-61.
	Rs.	Rs.	Rs.	Rs.
Meerut	2,54,635	1,76,267	2,48,356	1,65,516
Kumaon	14,154	5,008	14,154	4,014
Rohilcund	3,60,400	3,26,968	3,11,444	2,62,147
Agra	3,61,733	3,09,409	3,54,050	2,48,478
Jhansie	82,055	87,992	81,454	76,119
Allahabad	5,39,330	5,68,838	5,33,777	5,62,271
Goruckpore	2,24,526	2,32,655	1,97,593	2,21,800
Benares	5,45,784	6,17,145	5,34,001	6,09,598
Jubbulpore	2,36,544	2,91,161	2,36,127	2,89,347
Total ...	26,19,161	26,06,443	25,10,956	24,39,290

148. **Recapitulation of Loss and Expenditure of all sorts.**—To sum up the amount of known loss, we have the following well-ascertained statistics :—

	Rs.
* Expended in the distribution of food	5,41,783
* Ditto in advances for the purchase of seed and cattle ...	3,40,213
* Ditto in minor relief works	29,918
Ditto by Government only in public relief works	9,14,294
Remission of revenue	2,34,646
Total ...	20,60,854

There can be no doubt from these figures that better means of communication, and greater promptness in anticipating the effects of the drought, and improved organization for dealing with the distress had made famine a much less awful calamity than it was in 1837-38.

* For the details of these sums, see Appendix VII [of Mr. Girdlestone's Memoir].

INCREASE OF CRIME.

N.-W. P., 1860-61.—*Mr. Girdlestone's Memoir.*

149. Offences against Property.—The following table shows the state of crime before, during, and after the famine :—

Tabular Statement showing the amount of Dacoities and Robberies, Burglaries and Thefts, including Cattle-thefts, from 1860 *to* 1862.

Divisions.	Districts.	Dacoities and Robberies.			Burglaries.			Thefts, including Cattle-thefts.			Remarks.
		1860.	1861.	1862.	1860.	1861.	1862.	1860.	1861.	1862.	
Meerut.	Meerut	7	13	6	435	568	307	1,158	1,691	1,007	
	Allygurh	2	9	5	533	755	534	841	1,108	1,058	
	Saharunpore	10	4	10	317	314	295	650	840	646	
	Mozuffernugger	7	3	7	105	158	190	397	470	366	
	Boolundshuhur	5	14	10	317	544	325	875	1,406	888	
	Dehra Doon	0	0	0	5	15	36	42	57	221	
	Total	31	43	38	1,712	2,334	1,687	3,963	5,572	4,241	
Agra.	Agra	13	17	22	684	663	831	1,554	1,393	1,369	
	Muttra	6	7	4	370	217	202	405	400	224	
	Furruckabad	5	4	17	303	417	571	362	401	676	
	Mynpoory	4	8	9	267	256	187	339	458	399	
	Etawah	3	2	3	80	81	238	205	347	270	
	Etah	0	14	11	0	288	333	0	698	517	
	Total	31	52	65	1,704	1,922	2,362	2,955	3,757	3,455	
Rohilcund.	Bareilly	1	1	3	584	702	306	2,133	1,640	1,105	
	Bijnour	1	9	4	239	450	360	516	757	533	
	Moradabad	4	1	6	448	409	282	1,697	1,743	1,192	
	Budaon	7	8	9	409	375	389	1,760	1,694	1,177	
	Shahjehanpore	6	0	5	555	562	390	587	617	919	
	Total	19	19	27	2,235	2,498	1,736	6,693	6,451	4,926	
Allahabad.	Allahabad	4	2	5	113	95	138	353	331	414	
	Cawnpore	16	18	29	324	449	235	568	653	633	
	Futtehpore	4	7	15	183	186	352	102	242	214	
	Banda	0	5	5	154	124	114	446	309	0	
	Total	24	32	54	774	854	839	1,529	1,535	1,581	
Benares.	Benares	3	2	3	156	225	275	512	630	629	
	Goruckpore	10	5	5	631	403	185	1,107	801	538	
	Azimgurh	7	9	11	401	520	473	590	595	560	
	Jounpore	2	3	5	186	277	501	267	261	557	
	Mirzapore	10	5	7	142	44	194	379	176	294	
	Ghazeepore	15	16	17	331	403	640	402	444	502	
	Total	47	40	48	1,847	1,872	2,247	3,257	2,907	3,080	
Jhansie.	Jhansie	*Nil.*	13	3	*Nil.*	30	34	*Nil.*	278	212	
	Humeerpore		3	3		51	118		131	223	
	Jaloun		2	4		63	72		102	286	
	Lullutpore		24	14		44	42		298	273	
	Total		42	24		188	266		809	994	
Ajmere.	Ajmere	*Nil*	52	33	*Nil*	112	78	*Nil*	904	528	
	Grand Total	152	280	280	8,272	9,780	9,212	18,397	21,935	18,805	

From this it will be seen that offences against property, though more numerous in the Meerut, Agra, Rohilcund, and Allahabad Divisions during 1861, were only seriously disproportionate to the returns of 1860 and 1862 in the Districts of Meerut, Allygurh, Boolundshuhur, Bareilly, Bijnour, and Cawnpore.

150. **Greater order in 1860-61 than in 1837-38.**—There are other points too which it is pleasant to notice in connection with this famine. The beginning of trouble in 1837-38 was marked by a spirit of lawlessness and freebooting throughout the country. Neither the stores of the merchant nor the grain in transit was safe from attack. The starving people forgot all rights of possession, and violently laid their hands on their neighbours' supplies. In almost every district a larger police force had to be entertained, and this item added in no small degree to the burden of Government In 1860-61 there was no such outbreak, and I believe I am right in saying that it was not found necessary to engage a single extra constable to preserve the peace of the North-West Provinces. Offences against property were, as we have seen, more frequent, but the returns show that the crime was generally of a petty nature. It is probable that the general good conduct is attributable in some measure to the mutiny, the moral effects of which were doubtless still vividly impressed on the minds of the masses. Colonel Baird Smith allows some weight to this plea, but believes that much more was due to the healthier condition of native society.

STATISTICAL VIEW OF THE BEHAR FAMINE AFFAIRS, 1866.

From Mr. Cockerell's Report.

150. The following statistics in regard to the six districts in which the distress was most severe contain in one view a complete summary of the effects of the famine, and the extent of the relief measures undertaken to alleviate the condition of the people affected by it:—

1	2	3	4	5	6	7	8	9	10	11	12
DISTRICT.	Extent of area.	Estimate of population.	Extent of area in which the local distress was intense.	Amount of Government revenue derived from that area.	Number of relief centres.	Amount subscribed for relief.	Amount assigned by the Government for charitable relief.	Amount assigned from imperial and local funds for relief works.	Total amount expended in relief.	Total daily average number relieved gratuitously or by employment on public works in August 1866.	Total number of deaths from starvation or disease engendered by want.
	Square Miles.		Sq. Miles.	Rs.		Rs.	Rs.	Rs.	Rs. A. P		
Chumparun	3,781	870,000	1,700	3,36,261	10	9,574	14,500	5,000	24,451 7 0	5,217	56,000
Gya	5,689	1,367,392	1,360	4,78,514	6	12,371	1,000	9,050	12,640 1 3	1,080	3,387
Moonghyr ..	3,592	843,775	1,316	1,87,829	9	8,894	2,000	6,324	15,218 4 5	3,635	1,247
Sarun	2,612	1,200,000	700	6,81,462	12	16,147	10,000	25,000	45,308 10 0	6,635	8,175
Shahabad .	4,403	1,602,271	1,204		10	10,861	3,000	12,784	26,645 3 3	4,283	4,424
Tirhoot ...	6,114	1,856,279	3,000	7,43,098	25	38,315	4,000		39,447 10 6	11,841	60,321

16.3.11

Summary of Relief Measures.—Their inadequacy.

151. As regards the question of the general efficiency of the relief measures undertaken throughout the whole of the districts to which this report has reference, the results are as follow:—

The total amount expended from public funds was Rs. 2,29,202; the largest daily average number relieved during any one month of the period for which public relief measures continued was 37,329, whilst the total number of deaths ascertained to have occurred as the direct or indirect consequence of an insufficiency of food was no less than 135,676; so that, taking the number of deaths added to the number relieved as representing the aggregate of persons unable to support themselves during the famine, the number of persons relieved and supported, as compared with that of persons requiring relief, shows a proportion of but little more than one to five. The proportion of lives lost

to those saved was considerably upwards of three to one; and talking four months as the average period during which the public relief operations continued in full force, a sum of about Rs. 50,000 per month only was expended for the relief of upwards of 150,000 persons.*

Mortality.—Orissa, 1866.

From T. B. Lane, Esq., Secretary to the Board of Revenue, Lower Provinces, to the Secretary to the Government of Bengal,—(No. 1801M, dated Fort William, the 8th November 1867).

I AM directed to forward herewith, for submission to Government, copy of a letter No. 501 of the 24th July last, from the Commissioner of Cuttack, with its enclosures in original, containing the returns of mortality caused by the famine in Orissa, and statistics of population in the three districts of that province, together with detailed reports by the Collectors on the subject.

2. The Commissioner has submitted a consolidated statement showing the general results for the province. That statement, however, contained slight errors which have been corrected, and the accompanying revised return, marked A, prepared in this office. It shows that the total population in 1865† was 3,015,826; of these 814,469 have perished, and 115,028 have either emigrated or disappeared, making a total loss of 929,497 persons, and leaving 2,086,329 surviving inhabitants. The percentage of deaths to population is 27·00, which, added to 3·81, the percentage of emigrants or missing, gives a general percentage of 30 81 as loss of population during the famine.

3. The accompanying comparative statement, marked B, prepared in this office, shows that the population per square mile, which was 294 by the last survey, stood before the famine at 354, and is now 244.

4. The Board endeavoured, on receipt of these further details from the Commissioner, to obtain, if possible, reliable data regarding the ordinary rate of mortality both in Orissa and in other parts of Bengal. But the Medical Department have reported that they are not in possession of any such details, and the Board have failed also in procuring them from other sources. It is not possible, therefore, to draw any comparison between the exceptional and the ordinary rates.

[* The accuracy of the mortality statistics rendered by the police officers to Mr. Cockerell was subsequently contested by the local officers, the Commissioners and the Revenue Board.—J. G.]

[† In the census of 1872, the population of the three districts was returned at 3,034,690 souls, against 3,015,826 estimated above in 1865, and 2,086,329 in 1867. At first sight this seems to throw some doubt over the mortality returns also. But this can be fully accounted for. The mortality and the surviving population were scrutinised only in those tracts where there had been mortality on any scale, whereas in other tracts the population for 1865 and for 1867 was only estimated and, as it happened, under-estimated. The returns of actual mortality were the result of extensive and careful investigation, which the Commissioner described as follows: "I believe "the general accuracy of this statement (mortality statement for Orissa, 1866) may be relied on. "The system on which the figures have been obtained was as follows.—

"Printed tabular forms were prepared and distributed to every land-holder in the country to "be filled up and returned to the Collector's office. On receipt of the zemindars' returns officers "were specially deputed to check and test their accuracy. This has not been done in every estate, "as the agency at disposal was unequal to so extended an enquiry with any hope of completion, "within a reasonable time. The Deputy Collector's instructions were to visit every village in "which the loss of crops shown in the zemindars' returns amounted to one-half. Thus local "and careful enquiry has been made in all villages where the destruction of crop, and as a conse-"quence, loss of life, has been greatest; and in other cases, where there was reason to suspect the "accuracy of zemindary returns, they have been checked and corrected as far as possible."—J. G.]

Mortality.—Orissa, 1866.

Statement of Mortality in Orissa during the Famine of 1866, *as ascertained by local enquiries in* 1867.

1	2		3	4			5			6	7	8	9	10	11	12
DISTRICT.	NUMBER OF HOUSES AND HOMESTEADS.		Number of inhabitants in 1865.	DEATHS IN 1866.			DETAIL OF CLASSES IN WHICH THESE DEATHS OCCURRED.			Number of persons who have left their villages or emigrated.	Total loss of lives as per columns 4 and 6.	Number of remaining population.	Percentage of deaths of column 4 or 8.	Percentage of emigrated or missing of column 6 or 8.	Total percentage of loss of columns 7 and 8.	REMARKS.
	Number of houses in 1865.	Number of houses now inhabited.		Deaths from famine.	Deaths from disease induced by famine.	Total deaths.	Cultivators.	Laborers.	Artizans.							
CUTTACK.																
2,981 Mehals	241,678	206,346	1,503,829	320,410	57,599	378,009	183,887	94,346	99,776	53,357	431,366	1,072,463	25·13	3·58	28·71 28·68	Column 4 apparently includes deaths from all causes.
POOREE.																
40 Pergunnahs	122,110	101,873	779,718	175,955	37,989	213,944	101,895	73,734	36,333	32,113	246,057	528,712	27·44	4·11	31·55	
				Add Pooree Tn.		4,908		213,962			4,908				32·18	
						218,852		4,908			Differ. 41					
								218,870			256,965	528,753				
BALASORE.																
20 Pergunnahs	106,850	88,618	732,279	186,184	31,424	217,608	132,997	39,288	39,795	29,558	247,166	485,113	29·71	4·03	33·74 33·75	Exclusive of Government estate Noanund Beerso.
						Add for Balasore Town and other places.		212,080 3,411 2,117								
								217,608								
Total ...	470,638	396,899	3,015,826	682,549	127,012	809,561	418,779	209,368	175,904	115,028	924,589	2,086,288	27·43	3·91	31·34	The Board have in vain tried to obtain materials for showing approximately the ordinary rates of mortality in Orissa.
				Add as above		4,908		804,051			4,908	41	27·00	3·81	30·81	
							Balasore.	4,908 5,528								
				Total ...		814,469	.....	814,487	.....	.....	929,497	2,086,329				

FINANCE OF THE BENGAL FAMINE OF 1866.

In November 1873 Mr. Westland, Officiating Accountant-General, drew up an estimate of the financial effect of the famine in 1866 for all Bengal, including Behar and Orissa, of which the following is an abridgment :—

	1865-66.	1866-67	1867-68.	1868 69	Total.
	Rs.	Rs.	Rs	Rs	Rs.
1. Land-tax remitted absolutely in Orissa	..	4,41,137	In the original is shown month by month gross and nett		4,41,137
2 Land-tax suspended in Orissa and not since collected	..	11,23,304			11,23,304
3 Decline in Excise revenue reckoned at the normal rate of increment, about	3,00,000	9,00,000			12 00,000
4 Decline in Salt revenue reckoned at the normal rate of increment, about	20,00,000	5,00,000			25,00,000
5 Nett expenditure on Rice Importation (after deducting recoveries), also on Relief administration, and all other Famine charges ..	.				61,23,800
		Grand Total in even hundreds			1,53,88,200
				= (say) £	1,538,820

The above does not include expenditure incurred on public works either principally or solely on account of the famine.*

Mr. Westland has noted the ways and means as follows :—

FUNDS SUPPLIED FOR EXPENDITURE

		Rs.	Rs
1.	[Sale proceeds of] N.-W. P. FAMINE FUND [Securities held over from 1860-61]	..	6,17,805
2.	CALCUTTA RELIEF COMMITTEE	...	2,07,000
3	GOVERNMENT—		
	1866-67 34,85,750		
	1867 68 22,78,258		
	Total	57,64,008	
	Less recoveries—		
	1868-69 48,134		
	1869-70 104,146		
	Total ...	152,280	
	Total [Government]	56,11,728	56,11,728
	GRAND TOTAL		64,36,533

The statement of funds supplied almost tallies with that of expenditure incurred. Considering the lengthiness and intricacy of the accounts, the discrepancy, Rs. 12,733, is inappreciable.

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* In a table, cited hereafter, Mr Molony, Special Famine Commissioner, estimated that during 1867 (official year ?) the following amounts were spent on works in Orissa :—

		Rs.	Rs.
1.	Irrigation Canal [Capital Account of Company] ...	6,07,400	
2.	Department Public Works	8,42,348	
			14,49,748
3.	From Amalgamated District Road, Income Tax, and other Funds	87,394	
			87,394
		Total	15,37,142
		= (say)	£ 153,714

The rest of the expenditure shown in Mr Molony's table may be assumed to be included in Mr. Westland's estimate above

The expenditure is shown month by month in even hundreds under the following heads :—

	Expenditure on rice importation.	By Remittance, to relief committees.	Expenditure from district treasuries.	Total expenditure.	Recoveries at district treasuries.	Net expenditure.
1866-67 (from May 1866.)	37,22,600	4,03,500	6,09,700	47,95,800	9,10,300	38,85,500
1867-68	25,24,700	.....	3,16,900	28,41,600	4,96,300	23,45,300
1868-69	.....	.....	64,600	.....	1,12,800	—48,400
	Total expenditure		64,72,200			
	Less		48,000			
			64,23,800			

It does not appear from Mr. Westland's memorandum how far, if at all, the amounts subscribed by private individuals to the several Relief Committees and expended by these Committees are included in the above. The subscriptions seem to have been—

1866 (calendar year) :—

	Rs.	A.	P.
1. Amount raised and expended by the Calcutta Relief Committee as per Orissa Enquiry Commission, Volume II, page 642	3,46,516	15	1
2. Amount of all other subscriptions expended through Committees as per Orissa Enquiry Commission, Volume II, page 642	1,23,084	0	0
Total for 1866 ...	4,69,600	15	1

1867 (calendar year) :—

Subscriptions realised (see pages clix-cciii of Central Committee's Report)	6,14,533	7	1
Total for 1866 and 1867 ...	10 84,134	6	2

Orissa, 1866.—(Calendar year.)

EXPENDITURE ON BOTH RELIEF AND IMPORTATION.

Abridged from Board's Statement of 29th May 1868.

Col.			Mds.	Rs.
	1.	District—(The three districts arranged vertically in the first row; the column headings 2-12 all arranged horizontally against each district.)		
	2.	Total quantity imported	399,269	
Cost	3.	Paid by the Board		18,99,194
Cost	4.	Paid by the local officers		1,55,145
Cost	5.	Total		20,54,339
	6.	Deduct amount received from sale of grain ...		8,43,159
	7.	Difference		12,11,180
	8.	Deduct estimated value of grain in store on 1st January 1867		2,08.214
	9.	Net loss on importation		10,02,966
	10.	Add amount expended by the Famine Relief Committee		5,17,141
	11.	Total expenditure in 1866		15,20,107

Orissa, 1867.—(Calendar year.)

EXPENDITURE ON IMPORTATION ONLY.

Aggregate Cash Account of Importation Fund for the (calendar) year 1867.
Submitted by Revenue Board, 29th May 1868.

Receipts.

Col. 1.	Month (the column headings 2-8 in the original, arranged horizontally, and given month by month.)	Rs.	A.	P.
2.	Received from Accountant-General of Bengal	47,22,781	8	0
3.	Sale of grain	5,70,313	2	0½
4.	Miscellaneous	30,136	2	3
5.	Inefficient balances	1,16,145	6	2
6.	Advances from the Treasury ..	73,559	4	6
7.	Remittances from Board ..	3,67,845	13	8
8.	Former balance in Balasore ..	65	14	8
	Total ..	58,80,847	3	3½

Disbursements.

Col. 1.	Month. (Headings of disbursements 2-16 arranged horizontally and entered month by month.)	Rs.	A.	P.
2.	Purchase of rice	29,49,392	5	8
3.	Freight	9,85,845	7	7½
4.	Miscellaneous	1,66,432	2	3
5.	Establishment	92,215	15	6
6.	Remittances	3,82,845	13	8
7.	Commission and insurance on vessels ..	18,682	6	5
8.	Purchase of vessels	1,35,900	0	0
9.	Landing	94,656	3	4
10.	Inland Transport	1,11,694	11	10
11.	Depôt construction	52,839	2	2
12.	Inefficient balance	1,38,622	8	2
13.	Paid into Treasury	73,559	4	6
14.	Omitted at Bhuddruk	145	7	0
15.	Storage	5,474	5	8
16.	Shipping	6,416	11	11
	Total ..	52,14,722	9	8½

Rice Importation into Orissa during 1866.

STOCK ACCOUNT (BOARD'S) FOR 1866 (CALENDAR YEAR).

(*Submitted by Board to Government, No.* 135 *I of* 29*th May* 1868.)

Col. 1. District.—(In the original statement the items were shown according to district; the three districts arranged vertically occupied the index column, column 1; the totals for Orissa as here quoted were shown at foot.)

		Mds.	Rs.
QUANTITY IMPORTED.	2. As per Board's account	398,147	
	3. Deduction on account short delivery, wastage, &c.... ...	...	
	4. Net amount imported per Commissioner's account.	402,449	
5.	Quantity transferred to Pooree	3,770	
6.	Quantity lost by wreck, &c.	2,470	
7.	Quantity in transit to different *golahs*	14,086	
8.	Quantity sold to the public and Government ...	95,635	
9.	Amount of money received from the public and Government	...	4,02,892
10.	Quantity made over to the Famine Relief Committee	212,502	
11.	Amount of money received from the Famine Relief Committee	...	4,40,267
12.	Loss by wastage and by calculating bags at an uniform rate of 2 maunds	9,920	
TOTAL ACCOUNTED FOR IN COLUMNS 5 TO 12.	13. Quantity	338,383	
	14. Money	...	8,43,159
15.	Balance in store on 1st January 1867	64,066	
16.	Estimated value	...	2,08,214

STOCK ACCOUNT (BOARD'S) FOR 1867 (CALENDAR YEAR).

Statement of Receipts, Disbursements, and Balances of Stock of Rice imported into the Province of Orissa in 1867.

Col. I. Month.—(In the original statement the index column, column 1, is formed of the months January to December, arranged vertically; the other column headings, as under, 2-10 being arranged horizontally with entries against the several months; only the totals are transcribed here.)

		Mds.	Mds.
2.	Receipts	1,116,810	
3.	Sales to the public	128,165	
4.	Sales to Department Public Works	2,700	
5.	Sales to Famine Relief Committee	393,839	
6.	Total	...	524,704
7.	Transferred to Sale *golahs*	831,911	
8.	Received by transfer	851,911	
9.	In transit		
10.	Stock at Golahs at the end of the month (December 1867)*	617,642	

[* This was afterwards sold by auction.—J. G.]

RELIEF EXPENDITURE IN ORISSA, 1867-68.

From Report of Mr. Hobhouse, President of the Committee, dated 5th November 1868, p. XXV.

The financial results of our operations will be found in a balance-sheet (Appendix XXIV), prepared by our Secretary and Treasurer, Mr. Shekleton; and these speak for themselves.

The cash balances in Orissa on the 1st November 1868 amounted—

	Rs.	A.	P.	Rs.	A.	P.
In Cuttack ... to	83,189	9	9			
„ Pooree ... to	61,589	5	11			
„ Balasore ... to	73,607	7	10			
				2,18,386	7	6
and our Treasurer has in hand a sum of Rs.				2,76,819	12	2
making a total amount of Rs.				4,95,206	3	8

We have arranged to transfer this sum to Government, to be primarily applied to permanently providing for the famine orphans, and any balance to go towards recouping Government for the rice supplied to us for the purposes of relief.*

The proceeds of rice sold in Orissa may be approximately estimated at three and a quarter lakhs of rupees; but His Honor will remember that our "Fund" has borne all the expenses of establishment, carriage, and storage, throughout the province, and Government has thus been relieved of the loss incurred in retailing to the public at full and reduced rates.

The inefficient balance of Rs. 47,611 in the Orissa accounts is no doubt, at first sight, the most unsatisfactory item; but it may not unreasonably be supposed that a great portion of this is nominal, no sufficient allowance for wastage of rice, and short weight in cotton, thread, &c., having been made. Criminal proceedings have been instituted against certain Darogahs employed under the Committee, and, to judge by the decrees already obtained, it may be expected that at least 25 per cent. of this entire amount will eventually be recovered.

Altogether we are inclined to regard the expenditure, in comparison with the results achieved, as having been moderate; and taking into consideration the novelty and the extent of our operations, the numbers and the class of subordinate agents necessarily employed, and the great temptation and facilities for fraud presented by the nature of our operations, we trust that His Honor and the public will agree with us in our view of the expenditure, and in our opinion that much credit is due to those gentlemen who practically had the supervision and control over it.

* But see note p. 217, at the end of the section on Orphans.—J. G.

ORISSA, 1867.

Relief expenditure for Orissa charged off in Calcutta, 1st March 1867 to 1st November 1868.

(APPENDIX XXIV, PAGE CLVIII OF MR. HOBHOUSE'S REPORT.)

The Honorary Secretary and Treasurer in account with "The Orissa Famine and Orphan Relief Fund."

DEBTOR.	Rs. A. P.	Rs. A. P.
To Balance of former Relief Fund transferred to present account	.....	5,542 4 11
„ Total subscriptions and transfers from Government received to date, as advertised	6,14,553 7 1	
„ Less unpaid subscription, J. R. Thompson, Esq. ...	50 0 0	6,14,503 7 1
„ Refund from allotment for Purulia Orphans from Commissioner of Chota Nagpore	1,944 0 0	
Bank credit for unused Cheques	1 9 0	1,945 9 0
Total ...	.....	6,21,991 5 0
CREDITOR.		
By amounts remitted to Special Famine Commissioner, Cuttack*	.....	3,10,250 0 0
„ Allotment to Hazareebaugh and Purulia Orphans	25,855 0 0	
„ Allotment to Midnapore Orphans to October inclusive	575 8 0	26,430 8 0
„ Refund of excess payment to Board of Revenue	187 8 10	
„ Bonus to Honorary Secretary's Establishment ...	1,000 0 0	1,187 8 10
„ Miscellaneous Charges:—		
Stamps and postage	274 4 0	
Telegraph	346 15 0	
Printing	1,636 8 0	
Advertising	2,027 12 0	
Medicines and Vegetable Seeds	222 9 6	
Advances to employés sent to Orissa ...	282 0 0	
Establishment	1,878 14 8	
Miscellaneous, including stationery ...	620 6 10	
Bank Charges	14 2 0	7,303 8 0
		3,15,171 8 10
„ Cash in Bank of Bengal [1st Nov. 1868] ...	2,76,541 2 4	
„ „ in hand	278 9 10	2,76,819 12 2
Total ...	.....	6,21,991 5 0

E. E.,
A. B. SHEKLETON,
CALCUTTA, 1st *November* 1861. *Hony. Secy. and Treasurer.*

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* If it be desired to merge the two sets of expenditure collated in this and the next page but one ("relief expenditure charged off in Calcutta" and "relief expenditure charged off in Orissa"), then observe to omit the item marked* as it is accounted for in detail in the Orissa table.—J. G.

RELIEF EXPENDITURE CHARGED OFF IN ORISSA.

Orissa, 1867-68.—From Report of Mr. Molony, Relief Commissioner, dated 6th July 1868 (para. 34.)

34. Statement IV shows the receipts and disbursements. It has been made up exclusively of all items of mere transfer. The total receipts amount to Rs. 9,30,943-11-3½ and the disbursements to Rs. 6,42,104-6-9¾ leaving an actual cash balance of Rs. 2,41,227-15-1, and an inefficient balance of Rs. 47,611-5-4¾. The items of receipts and expenditure will be found to tally with those entered in the detailed statements, or where they do not, an explanation has been given in the remark column of those Statements. There are, of course, some items —such, for instance, as Orphanage charges—which do not appear in the Statements, and one or two which require some explanation as to details, which can be more conveniently given in a separate memorandum, which I send herewith, as also a detailed Statement of the items composing the inefficient balance. Mr. Kirkwood, in order to bring the whole operations under review, has entered sums for sale of articles which have not yet been realized, and this will account for a large portion of the balance. The rest is composed of sums retrenched from the accounts of relief officers on account of short stocks of rice and cloth, &c., and unadjusted cash advances. I am afraid a very considerable sum will be irrecoverable. The cash balances shown are not all up to the latest date; for Balasore and Pooree they are made up to the 30th April and for Cuttack to a still later* date. They will be subject to some diminution, as the Orphanage monthly charges and some few petty current expenses have still to be met. The actual balances on the 1st of June are noted on the margin, and amount to Rs. 2,37,310-8-10¾

	Rs.	A.	P.
Cuttack ...	91,840	1	6
Pooree ...	66,664	15	4½
Balasore ...	77,805	8	0¼
Total ...	2,37,310	8	10¾

To this might be fairly added the sum of Rs. 23,021-8-11 paid since January on account of orphans, to be recovered from the Orphanage Maintenance Fund, making a total of Rs. 2,60,339-1-9¾ available for transfer. It would be wise, however, to retain a sum of not less than Rs. 10,000, to prevent the possibility of there being any delay in the Orphanage payments, or in the procuring of money for necessary expenditure, such, for instance, as the prosecution of several civil suits which have been instituted against defaulters, or for other unforeseen claims during the interval between the present date and the final approval of the Committee's proposal by the Government. On the final adoption of the proposals the balance might be transferred with the outstanding assets and liabilities.

IV.

RELIEF EXPENDITURE 1867-68 CHARGED OFF IN ORISSA.

General Statement of Receipts and Disbursements in Orissa, March 1867 to June 1868.

	Cuttack.	Pooree.	Balasore.	Total.
Receipts.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Balance on 1st March [1867]	17,228 6 6	4,407 12 5¼	5,894 7 2	27,530 10 1¼
Remittances from Calcutta Committee	1,00,000 0 0	1,21,500 0 0	88,750 0 0	3,10,250 0 0
Sale proceeds of rice	2,60,334 0 0	41,527 2 7	32,807 10 1¼	3,34,668 12 8¼
Light labor	58,754 0 2	6,887 7 0	6,286 11 8	71,928 2 10¼
Sale proceeds of cloth and thread	91,203 14 5	18,690 10 3	4,086 12 6	1,13,981 5 2
Ditto of cotton ...	6,326 14 0	1,627 12 7	118 0 0	8,072 10 7
Sale of cloth manufactured on old system	.....	.....	550 14 3	550 14 3
Capitation allowance of orphans	13,164 0 0	7,028 0 0	4,099 13 4	24,291 13 4
Sale of miscellaneous articles	7,587 1 4¼	3,363 9 7	2,258 1 9	13,208 12 8¼
Local subscriptions	348 0 0	.....	37 0 0	385 0 0
Sale of coir-rope	.....	182 14 5	.....	182 14 5
Net amount received from Collector on adjustment of accounts	.....	717 5 2	.....	717 5 2
Sale proceeds of Bhuddruck cloth	718 10 3	.....	.....	718 10 3
Light labor proceeds of work not executed on light labor system	656 15 6	.....	.....	656 15 6
Miscellaneous	21,717 5 0	1,592 10 10½	489 12 5	23,799 12 3½
Total ...	5,78,039 3 2¼	2,07,525 4 10¼	1,45,379 3 2¼	9,30,943 11 3¼
Disbursements.				
Contingencies of centres ...	50,862 10 3½	13,900 13 4	14,324 9 2	79,088 0 9½
Transport charges	19,563 8 0	15,784 0 8	2,131 1 6	37,478 9 9
Purchase of grain	.....	367 13 5	97 2 0	464 15 5
Light labor	1,06,548 4 7¼	10,656 13 10	18,900 5 7	1,36,105 8 0¼
Purchase of cloth for gratuitous distribution	10,538 6 10½	3,330 4 6	1,818 1 6	15,686 12 10½
Ditto of cotton	77,551 14 9½	17,184 7 6	5,614 10 1	1,00,351 0 4½
Weaving and spinning relief	29,652 14 8	5,054 8 9	1,435 10 10	36,143 2 3
Maintenance of orphans ...	33,568 6 3	16,790 13 10	8,795 1 3	59,154 5 4
Orphanage buildings... ...	8,639 10 4	4,000 0 0	1,100 0 0	13,739 10 4
Purchase of miscellaneous articles...	1,149 0 0	842 1 10	.....	1,991 1 10
Purchase of coir	.....	292 3 10	.....	292 3 10
Establishment	72,491 4 8½	36,079 2 11½	7,955 15 10	1,16,526 7 6½
Proportion of Special Commissioner's office establishment debitable to Pooree and Balasore...	2,000 0 0	.....	.....	2,000 0 0
Buildings	15,874 11 4	7,841 0 5	2,617 3 0	26,332 14 9
Settling paupers as ryots ...	.....	500 0 0	.....	500 0 0
Miscellaneous	2,009 7 4½	2,727 11 5	1,256 8 3	5,993 11 0½
Money relief by Deputy Collectors	6,606 15 10½	1,836 5 9	.....	8,443 5 7½
Advanced district officers for relief on close of operations	400 0 0	.....	.....	400 0 0
Repairs of houses	851 3 10	.....	.....	851 3 10
Weaver's relief under old system	.....	.....	561 5 3	561 5 3
Total Rs. ...	4,38,308 6 11½	1,37,188 5 7½	66,607 10 3	6,42,104 6 9½
Balance [1st June 1868]...	92,119 6 10	70,336 15 3½	78,771 8 11½	2,41,227 15 1½
Inefficient balance	47,611 5 4½	.....	.....	47,611 5 4½
Grand Total ...	5,78,039 3 2¼	2,07,525 4 10¼	1,45,379 3 2¼	9,30,943 11 3¼

E. W. MOLONY,
Special Famine Commissioner.

IV*a*.

Sums of Receipts and Disbursements from Orissa Famine and Orphan Relief Fund not shown in Statement IV, showing the Balance on the 1st of June 1868.

	Cuttack.	Pooree.	Balasore.	Total.
Receipts.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Balance as by H Statement No 4 ...	92,119 6 10	70,336 15 3¼	78,771 8 11½	2,41,227 15 0¼
Sale proceeds of rice	.....	442 7 0	.....	442 7 0
„ „ cloth, thread and cotton ...	.....	1,497 8 2	120 1 3	1,617 9 5
Miscellaneous	250 0 0	23 1 6	315 14 0	588 15 6
Recovery of capitation allowance for December 1867, erroneously not recovered before	1,646 0 0	.....	.....	1,646 0 0
Recovery from inefficient balance ...	181 6 2	.....	.....	181 6 2
Grand Total	94,196 13 0	72,299 15 11½	79,207 8 2½	2,45,704 5 1½
Disbursements.				
Establishment	16 0 0	2,374 8 10	60 12 6	2,451 5 4
Orphanage allowances	1,192 0 0	1,955 8 0	1,341 3 8	4,488 11 8
Expenses of paupers at Cuttack Central Hospital for April, 1868 ...	34 13 3	.....	.....	34 13 3
Law expenses in instituting suit for recovery of item No. of inefficient balance	986 0 0	.....	.....	986 0 0
Miscellaneous	61 0 11	304 15 9	.....	366 0 8
Written off errors in April Cash Account, and unaccounted for by the Relief Manager	66 13 4	.....	.....	66 13 4
Total	2,356 11 6	4,635 0 7	1,402 0 2	8,393 12 3
Balance, Rs.	91,840 1 6	67,664 15 4¼	77,805 8 0½	2,37,310 8 10¼
Grand Total, Rs. ...	94,196 13 0	72,299 15 11½	79,207 8 2½	2,45,704 5 1½

E. W. MOLONY,
Special Famine Commissioner.

ORISSA, 1867.

Statement shewing the results financially of each class of Relief, including value of Rice.

	Class of Relief.	Total number of persons relieved.	Total cost.	Receipts.	Net expenditure.	Average cost of each person per month.
			Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Cuttack.	Centres, including hospitals	101,125	2,50,855 9 7½	.....	2,50,855 9 7½	2 7 8
	Orphans	10,465	42,208 0 7	13,164 0 0	29,044 0 7	2 12 4
	Weaving and spinning relief	51,473	1,62,472 12 4½	1,00,500 6 5	61,972 5 11½	1 3 3
	Light labor	44,243	1,12,340 11 5½	58,754 0 2½	53,592 11 3½	1 3 4
	Village relief	148,020	99,857 10 9	.....	99,857 10 9	0 10 8
Pooree.	Centres, including hospitals	40,209	91,178 14 9½	.....	91,178 14 9	2 4 3
	Orphans	4,493	20,790 13 10	7,028 0 0	13,762 13 10	3 1 0
	Weaving and spinning relief	13,534	42,204 3 4	20,318 4 10	21,885 12 6	1 9 9
	Light labor	3,872	12,521 15 1	6,887 7 0	5,634 8 1	1 7 3
	Village relief	69,720	74,022 9 0	.....	74,022 9 0	1 0 11
Balasore.	Centres, including hospitals	15,168	41,792 12 8	.....	41,792 12 8	1 12 1
	Orphans	3,188	9,895 1 3	4,099 13 9	5,795 3 6	1 13 1
	Weaving and spinning relief	3,766	11,484 9 6	4,204 12 6	7,279 13 0	1 14 10
	Light labor	9,834	20,347 0 8	6,286 11 8	14,060 5 0	1 6 10
	Village relief	.....	.....	.....	.....	.....
		519,110	9,91,978 12 11½	2,21,243 10 4½	7,70,735 2 7½	.....

E. W. Molony,
Special Famine Commissioner.

Comparative cost of the different modes of relief administered in Orissa, 1867.

Mode.	Average cost per person per month.			
	Cuttack.	Pooree.	Balasore.	General average.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Centralised relief—(cooked food inside poor-houses)	2 7 8	2 4 3	1 12 1	2 7 9
Village (or home) Relief [distribution of grain]	0 10 8	1 0 11	.....	0 13 9
Light labor gangs	1 3 4	1 7 3	1 6 10	1 5 10
Spinning and weaving relief	1 9 9	1 3 3	1 14 10	1 9 3

Orissa, 1867.

General Statement of the daily average number of persons relieved in each month from March 1867 to close of operations.

Districts.	Month.	At centres.	By spinning.	By weaving.	Light labor.	Orphans.	By village relief.	Village cash relief and thatching.	Total per each month.
	1867.								
Cuttack.	March	31,962	1,498	.....	2,145	637	.....	.....	36,242
	April	18,222	3,554	18	7,304	747	.....	.....	29,845
	May	10,473	5,780	12	9,178	847	3,300	1,945	31,535
	June	9,974	5,994	738	8,382	826	11,179	1,789	38,882
	July	9,141	7,921	3,645	6,301	870	21,460	1,428	50,766
	August ...	8,416	6,320	3,975	5,099	858	41,237	3,020	69,525
	September ...	5,840	4,684	1,635	3,067	816	37,483	742	54,207
	October ...	3,058	2,928	1,032	1,886	762	15,176	168	25,910
	November ...	2,199	1,201	519	881	794	7,935	485	14,014
	December ...	714	19	.....	.....	852	.....	73	1,658
	1868.								
	January ...	151	.....	.....	.....	836	.....	.....	987
	February ...	40	.....	.....	.....	820	.....	.....	860
	March	35	.....	.....	.....	800	.....	.....	835
	Total ...	101,125	39,899	11,574	44,243	10,465	137,770	10,250	355,326
	1867.								
Poorer.	March	7,780	.....	.....	.....	154	83	2,478	10,495
	April	8,780	720	156	372	261	3,266	119	13,674
	May	7,087	1,213	327	372	311	5,276	38	14,624
	June	5,921	1,480	504	190	322	12,880	1,702	22,999
	July	4,452	1,818	672	664	360	7,200	304	15,465
	August ...	3,083	2,147	879	611	399	14,160	65	21,344
	September ...	1,938	840	783	603	393	10,650	16	15,223
	October ...	926	640	543	596	392	5,970	.....	9,067
	November ...	160	253	345	256	405	3,550	.....	4,969
	December ...	82	27	192	208	411	1,963	.....	2,883
	1868.								
	January ...	.....	.....	.....	.....	377	.....	.....	377
	February ...	.....	.....	.....	.....	363	.....	.....	363
	March	.....	.....	.....	.....	345	.....	.....	345
	Total ...	40,209	9,133	4,401	3,872	4,493	64,998	4,722	131,828
	1867.								
Balasore.	March	3,907	.....	.....	2,331	195	.....	.....	6,433
	April	3,566	.....	.....	1,571	184	.....	.....	5,321
	May	2,960	53	.....	1,455	236	.....	.....	4,704
	June	1,894	80	15	630	233	.....	.....	2,861
	July	1,354	533	183	661	225	.....	.....	2,956
	August ...	843	840	188	863	240	.....	.....	2,978
	September ...	421	680	255	855	277	.....	.....	2,488
	October ...	149	520	111	700	291	.....	.....	1,771
	November ...	57	213	72	205	286	.....	.....	833
	December ...	17	13	15	264	272	.....	.....	581
	1868.								
	January ...	.....	.....	.....	290	261	.....	.....	551
	February ...	.....	.....	.....	.....	249	.....	.....	249
	March	.....	.....	.....	.....	230	.....	.....	230
	Total ...	15,168	2,932	834	9,834	3,188	.....	.....	31,956

E. W. Molony,
Special Famine Commissioner.

ORISSA, 1867.

II.

Abstract Statement showing the quantity of Rice, Cotton, Thread, Cloth, and Miscellaneous Articles, received and disposed of in each district.

RECEIVED OR PURCHASED.

Districts.	Rice.	Cotton.	Thread.	Cloth.	Miscellaneous articles.	Remarks.
	Maunds.	M. S. C.	M. S. C.	M. S. C.		
Cuttack	242,308	3,585 0 0	2,582 0 0	1,710 0 0	Tools ... ... 8,000 Boats ... ... 2 Tent ... ... 1 Tents 31	In addition to the cloth shown in column 5, a large quantity was purchased in the local market and distributed at centres.
Pooree	87,526	833 32 14½	642 0 0	16,842½ pairs.	Weights and scales with brass weights 13 Ditto iron 17	
Balasore	25,474	241 0 0	189 0 0	2,320 do.	Tools ... ... 3,852 Kodalees 1,090	
Total ...	355,308	4,659 32 14½	3,413 0 0	.....		

HOW DISPOSED OF.

Cuttack.						*a.*—Of this sum wastage allowed 5,387; disallowed 5,068. For chutter use and for weight of packings 4,579.
Distributed at Centres	52,188	.....	.....	212		*b.*—Lent to officer conducting embankment inquiry.
Spinning	15,251	2,992	.....	.....		*c.*—Of this 38 maunds charged to Darogah.
Weaving	3,334	.....	1,449	.....		* Given over to the Magistrate.
Light labor	30	.....	.....	.....		
Village relief	34,257	.....	.....	.....		
Sold	106,400	457	999	1,397	Boats 2	
Otherwise expended	.....	.....	.....	20	Tools 5,706	
Returned to Government	15,814	.....	.....	.....	,, ... 2,206*	
Transferred to Pooree	.....	.....	52	.....	,, Lost 88	
Loss	15,034*a*	136	82	81*c*	Tent 1*b*	
Total ...	242,308	3,585	2,582	1,710		

ORISSA, 1867.—(Continued)

II.

Abstract Statement showing the quantity of Rice, Cotton, Thread, Cloth, and Miscellaneous Articles, received and disposed of in each district.—(Continued.)

HOW DISPOSED OF.—(contd).

	Districts.	Rice.	Cotton.	Thread.	Cloth.	Miscellaneous articles.	Remarks.
Pooree.	Distributed at Centres	19,252	.....	.....	2,290	Tents 31*	* Made over to the Collector; they are unsaleable.
	Spinning	3,531	685 0 0	.....	.....	Weights and scales with brass weights 13 †	† Made over to the Importation Department.
	Weaving	2,004	.....	554 0 0	.....	Ditto iron ... ... 17 †	
	Light labor	1,294	.....	.....	.....	Tools ... ... 1,998 ‡	‡ Made over to the Magistrate.
	Village relief	19,500	.....	.....	.....		
	Other labor	94	.....	.....	.....		
	Distributed to pauper villages ...	203	.....	.....	.....		
	Sold	36,925	137 21 1	87 0 0	14,552½		
	Loss	4,723	11 11 13¾	1 0 0	.....	„ 1,814	
	Total ...	87,526	833 32 14¾	642 0 0	16,842½	„ 40	
Balasore.	Distributed at Centres	6,595	.....	.....	.....		
	Spinning	1,143	220	.....	.....		
	Village relief	333	.....	.....	.....		
	Sold	16,105	13	80	2,320	Kodalees 1,087	
	Returned to Government	3	.....	.....	.....		
	Weaving	.....	.....	105	.....		
	Loss...	1,294	8	4	.....	„ 3	
	Total ...	25,474	241	189	2,320		

E. W. Molony,
Special Famine Commissioner.

VI.

Statement showing the value of the rice received from Government (including stock on hand on 20th February) and debited to the Committee in the Importation Accounts, the quantity sold and the value recovered compared with the Cash Balance in hand on the 1st of June 1868.

DISTRICTS.	Quantity received less that returned.	Value.	Quantity sold.	Value.	Cash balance on 1st June 1868.	Deficit in column 3.	Deficit in column 5.	REMARKS.
	Maunds.	Rs. As. P	Maunds.	Rs. As. P.	Rs. As. P.	Rs. As. P.		
Cuttack	2,25,498	6,72,863 11 0	1,06,400	2,60,334 0 0	91,840 1 6	5,81,023 9 6		
Pooree	87.526	2,60,947 5 7½	36,925	*a* 41,969 9 7	67,664 15 4½	1,93,282 6 3		*a*.—Of this sum Rs. 442-7-0 paid in May, not included in Statement III.
Balasore	24.658	78,741 5 5	16,105	32,807 10 1½	77,805 8 0½	935 13 4½		
Total ...	3,37,682	10,12,552 6 0½	1,59,430	3.35,111 3 8½	2,37,310 8 10½	7,75,241 13 1½	*b* 97,800 10 9½	*b*.—This is the actual deficit after allowing for surplus in Pooree and Balasore.

E. W. MOLONY,

Special Famine Commissioner.

Statement showing approximately the sums spent on works in the Province by the employment of local labor during 1867.

Names of Districts.	Irrigation Canal.	D. P. W.	Importation, Transport, Building, Landing, &c.	Relief, Light Labor, Transport, and Building.	From amalgamated District Road Income Tax and other like funds.	Total.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Cuttack	6,07,400 0 0	3,99,635 11 7	1,64,415 0 0	1,41,986 7 11½	22,870 12 0	13,36,307 15 6½
Pooree	.....	2,41,636 2 7	69,635 0 0	33,281 14 6	27,851 3 3	3,72,454 4 4
Balasore	.....	2,01,076 6 3	11,408 0 0	23,648 10 1	36,672 11 8	2,72,805 12 0
Total ...	6,07,400 0 0	8,42,348 4 5	2,45,508 0 0	1,98,917 0 6½	87,394 10 11	19,81,567 15 10½

E. W. Molony,

Special Famine Commissioner.

Statement shewing the Relief Operations in the Madras Presidency in 1866-67.

(From Mr. Dalyell's Memoir.)

Distressed Districts.	Number of Relief Houses.	Enumeration of the aged, sick, and infirm relieved. Average number of persons relieved per day, including women and children. February 1866.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January 1867.	February.	March.	April.	May.
1. Bellary	244	.....	.....	.....	.....	.....	3,613	15,955	28,693	32,310	19,938	15,590	10,158	6,743	5,019	3,301	3,113
2. Kurnool...	3	.....	.....	.....	.....	.....	.....	.....	.....	2,082	2,130	1,482	1,564	331	198	.....	.....
3. Salem	23	.....	.....	.....	.....	.....	592	6,495	6,966	6,530	4,879	3,545	856	272	.....	.....	.....
4. Coimbatore	12	.....	.....	.....	.....	.....	.....	628	1,558	1,740	1,909	1,378	1,161	789	657	.....	.....
5. North Arcot	18	.....	.....	.....	.....	.....	.....	8,133	8,114	8,021	5,896	3,890	964	.....	.....	.....	.....
6. South Arcot	20	.....	.....	.....	.....	.....	84	1,436	2,333	1,779	1,575	1,356	1,047	.....	.....	.....	.....
7. Trichinopoly	5	.....	.....	.....	.....	.....	.....	2,500	4,166	3,016	300	.....	.....	.....	.....	.....	.....
8. Madura	10	.....	.....	.....	.....	.....	.....	4,313	5,375	5,540	3,892	4,203	3,407	2,071	1,077	1,355	800
9. Malabar	84	.....	.....	.....	.....	.....	2,835	24,094	3,507	284	271	.....	.....	.....	.....	.....	.....
10. Madras District ...	3	.....	.....	.....	.....	.....	.....	.....	.....	240	290	290	290	100	.....	.....	.....
11. Madras Town	4	.....	.....	.....	.....	.....	.....	1,372	2,318	3,566	4,271	3,869	3,835	3,607	.....	.....	.....
Total ...	426	.....	.....	.....	.....	.....	7,124	64,926	63,030	65,108	45,351	35,603	23,282	13,903	6,951	4,656	3,913
12. Ganjam	18	584	737	1,547	2,535	5,647	14,240	17,874	25,252	27,672	30,555	17,801	1,855	146	.....	.....	.....
13. Tanjore	13	.....	.....	.....	...	.....	3	145	4,771	7,579	3,823	3,183	2,483	.....	.....	.....	.....
Grand Total ...	457	584	737	1,547	2,535	5,647	21,367	82,945	93,053	100,359	79,729	56,587	27,620	14,049	6,951	4,656	3,913

Statement shewing the Relief Operations in the Madras Presidency in 1866-67.—(Continued.)

(FROM MR. DALYELL'S MEMOIR.)

DISTRESSED DISTRICTS.	EXPENDITURE ON THE RELIEF OF THE AGED, SICK, AND INFIRM.				
	Expenditure at the Relief Houses up to date.	AMOUNT OF FUNDS OBTAINED FOR THE RELIEF OF THE AGED, THE SICK AND THE INFIRM.			
		From the Government.	From the General Relief Fund.	From local subscriptions.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1. Bellary	1,60,793 2 8	4,492 8 10	54,870 10 4	47,429 15 6	1,06,793 2 8
2. Kurnool	11,729 1 0	.....	6,377 10 7	6,141 0 0	12,518 10 7
3. Salem...	24,595 0 2	.....	11,000 0 0	15,464 15 5	26,464 15 5
4. Coimbatore	11,798 4 1	1,000 0 0	3,765 0 0	8,125 14 1	12,890 14 1
5. North Arcot	27,449 11 1	24,172 4 3	6,000 0 0	7,030 11 4	37,202 15 7
6. South Arcot	7,490 5 9	.....	3,000 0 0	6,793 9 10	9,792 9 10
7. Trichinopoly	4,964 11 9	.....	854 0 6	4,110 11 3	4,964 11 9
8 Madura	24,024 0 5	.....	12,100 0 0	13,922 12 3	26,022 12 3
9. Malabar	19,270 0 4	.....	1,403 4 0	17,866 12 4	19,270 0 4
10. Madras District	1,430 3 2	.....	650 0 0	821 3 2	1,471 3 2
11. Madras Town	39,603 14 2	.....	20,834 13 5	18,769 0 9	39,603 14 2
Total ...	2,79,148 6 7	29,664 13 1	1,20,855 6 10	1,46,475 9 11	2,96,995 13 10
12. Ganjam	2,10,999 12 10	1,65,809 10 7	20,000 0 0	20,127 6 0	2,05,937 0 7
13. Tanjore	17,920 6 5	.....	50 0 0	19,874 15 5	19,924 15 5
Grand Total ...	5,08,068 10 1	1,95,474 7 8	1,40,905 6 10	1,86,477 15 4	5,22,857 13 10

Statement shewing the Relief Operations in the Madras Presidency in 1866-67.—(Concluded.)

(FROM MR. DALYELL'S MEMOIR.)

DISTRESSED DISTRICTS.	THE RELIEF OF THE ABLE BODIED.																
	Number of Relief Houses.	AVERAGE NUMBER OF ABLE-BODIED PERSONS EMPLOYED PER DAY, DURING EACH MONTH OF FAMINE WORKS.															Sums expended on the Famine works.
		April 1866.	May.	June.	July.	August.	September.	October.	November.	December.	January 1867.	February.	March.	April.	May.	June.	
																	Rs. A. P.
1. Bellary	244	...	...	...	.....	3,090	8,263	9,500	11,616	17,492	19,421	18,109	15,310	7,467	4,378	.....	4,47,540 4 0
2. Kurnool	3	...	...	...	.....	.....	391	645	443	876	841	.....	303	555	233	162	15,016 9 8
3. Salem	23	...	...	...	83	659	930	644	322	373	427	309	35	.....	.....	.....	27,886 10 9
4. Coimbatore	12	...	...	...	.....	26	600	1,182	1,237	949	490	112	5	.....	.....	.....	19,145 0 4
5. North Arcot	18	...	...	...	.....	1,404	2,032	2,950	2,706	5,000	5,000	5,000	5,000	.....	.....	.....	1,00,000 0 0
6. South Arcot	20	...	...	...	8	725	957	839	1,108	568	636	4	.....	.....	.....	.....	15,910 3 11
7. Trichinopoly	5	...	...	...	.....	.....	.....	172	39	46	43	43	43	43	43	43	930 1 6
8. Madura	10	...	...	...	.....	.....	.....	60	310	310	6,161	5,313	739	763	739	763	19,408 2 0
9. Malabar	84	...	...	...	.....	112	328	209	126	.....	.....	.....	.....	.....	.....	.....	5,758 5 3
10. Madras District	3	...	...	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11. Madras Town	4	...	...	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total ...	426	...	...	...	91	6,016	13,501	16,201	17,907	25,614	33,019	28,890	21,435	8,828	5,393	968	6,51,595 5 5
12. Ganjam	18	150	425	783	1,481	513	498	351	361	.....	.....	.....	.....	.....	.....	.....	8,967 9 11
13. Tanjore	13	...	...	...	.....	.....	.....	...	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grand Total ...	457	150	425	783	1,572	6,529	13,999	16,552	18,268	25,614	33,019	28,890	21,435	8,828	5,393	968	6,60,562 15

MORTALITY.

Mr. Dalyell's Memoir.—Madras Presidency, 1866.

135. On the whole, it must be a subject of cordial congratulation to the Committee to consider that, thanks in part to their exertions, the scarcity with which nearly the whole of the Presidency was afflicted in June last, never became so severe as to be described as a general famine, and that with the exception of the district of Ganjam, there was no locality in the Presidency, in which the number of deaths was very seriously increased by mortality from absolute starvation. It must also be satisfactory to them to reflect that, for four months of the year, nearly 100,000 of the aged, the young, and the infirm, were kept alive by the measures of relief which they aided in directing, the greater portion of whom would probably have perished of starvation, had no system of gratuitous distribution of food been adopted.

Ganjam, 1866.—Mr. Gordon Forbes.*

We have already spoken of the loss of inhabitants during the famine, and Table (C) will show the exact number of deaths reported during the 12 months from 1st October 1865 to the end of September 1866. No deaths from actual starvation probably occurred before December 1865. These returns fall, doubtless, far below the mark, for reasons previously stated, and the heads under which they are made cannot be relied on, as many of those set down as from cholera, were really the result of starvation. The total deaths in the whole district were 56,262, or about 50 in 1,000. Deaths from starvation, 10,898, *i.e.*, rather less than one-fifth of the total deaths. The total deaths in the northern division were 38,937, or about 56 in 1,000; of these, 10,867 were from starvation, *i.e.*, about one-third of the total deaths in this division. It is to be regretted that, as the Mortuary Register Office was not established in this district until August 1865, it is not possible to compare the death-rate of the present with that of the previous year. The next census, however, will afford better data on which to calculate the loss of inhabitants during the year than the present mortuary returns afford. These returns have, no doubt, been somewhat swelled by the deaths of many who came into the district from Orissa; but their numbers are too small to make any very appreciable difference. This loss of life has shown itself in the decrease of cultivation in the district, which shows up to October, as compared with the same month in Fasli 1275, in the Berhampore taluk, a decrease of 17,704 acres in extent, and 34,224 rupees assessment. In Gumsur, a decrease of 8,251 acres, and 20,944 rupees assessment. This, however, is counterbalanced by a slight increase in Chicacole taluk. What the decrease has been in zemindary estates it is impossible to say, but probably very much greater, as they have not shared the same advantages as Government ryots. This decrease is also partly due to the poverty of the inhabitants, and their inability to purchase seed. It is impossible, however, to form any correct notion of the full extent of the decrease until the trade of the district shall have returned to its usual course; but it will probably require several abundant years for the country fully to recover from the calamity it has suffered.

* Parliamentary Bluebook on the Madras Famine.

MORTALITY IN GANJAM.

Mr. Gordon Forbes's Table (C) abridged.

Statement shewing the Deaths in the Ganjam District, &c.

NAME OF TALUQ.	Population, last Census, taken in 1861-62.	Total Deaths.	Cholera.	Small-pox.	Starvation.	Other Diseases.
ABSTRACT.						
Deaths from October 1865 to September 1866, in the Principal Division	6,82,804	38,937	16,317	3,240	10,867	8,513
Deaths from October 1865 to September 1866, in the Sub-Division	4,46,660	17,325	9,537	1,090	31	6,667
Total ...	11,29,464	56,262	25,854	4,330	10,898	15,180

INCREASE OF CRIME.

Ganjam, 1866.—Mr. Gordon Forbes's Report.*

The famine was marked by the great increase of crime throughout the northern division. This increase was chiefly in offences against property. The offenders belonged in the main to the very low castes, who were driven to this course through want and hunger. The cattle of the ryots were stolen and slaughtered, especially in some of the smaller and unprotected villages. These thefts were of daily occurrence, but detection was very difficult, as usually whole families were concerned in the commission, and all traces soon disappeared. However, during the last two months, few offences of this kind have been reported, and crime generally has decreased wonderfully. The offences against property were generally of a simple character, and consisted chiefly of petty thefts of grain and household utensils. Only one case of serious gang robbery occurred, and even that was not of an aggravated description. The large percentage of convictions, as compared with former years, is worthy of notice. Of 1,466 cases filed in the sub-magistrates' courts, in the principal division, in 1864, 638 cases were discharged; in 1865, of 1,329 cases, 431 were similarly treated; whilst in the nine months of 1866 ending September, of 1,427 cases, only 286 were discharged.

The following statement will show the comparative increase in crime.

Cases disposed of at Senior Assistant Magistrate's Office.

January, to the end of September,		1864	.. ..	122
Ditto	ditto,	1865	.. ..	123
Ditto	ditto,	1866	.. ..	430

Memorandum of cases disposed of by the sub-magistrates during 1864, 1865, and to in September 1866, is appended [in Table (E.)]

* Page 257, Parliamentary Bluebook on Madras Famine.

[Table (F.)] will show the average numbers of convicts confined in gaols of the district from January to September 1865, in comparison with the same period in 1866. Great difficulty was experienced from want of sufficient gaol accommodation. The gaol at Berhampore was built for about 250 prisoners only, yet the average number confined during September and October was over 600.

The evils consequent on over-crowding have, in some measure, been mitigated by despatching about 200 short-term prisoners to Chicacole, where the buildings of the old zillah gaol are still standing, and have been easily adapted for the purpose of a temporary gaol, and 200 more to the Rajahmundry gaol. These convicts were despatched in gangs at intervals. The first gang of 100 to Rajahmundry in April; to Chicacole, of same number, in July; the second gang to each place was despatched in November.

MISCELLANEOUS STATISTICS OF THE 1866* FAMINE.

Annals of Indian Administration, Vol. XI, Part I.

The following statistics are taken from the Appendix [of the Orissa Enquiry Commissioners' Report], with the exception of the last two tables, which attempt to show the mortality caused, directly or indirectly, by the Famine, and the cost of relief, in all the districts of Eastern India.

Areas and Population of Orissa and Bengal which suffered severely and intensely, omitting the Patna and Bhaugulpore Divisions.

[APPROXIMATE.]

DISTRICTS.	Square miles.	Population.	Portion over which the Famine was severe.		Portion over which the Famine was intense.	
			Square miles.	Population.	Square miles.	Population.
Pooree	2,697	588,741	.....	.....	2,697	588,741
Cuttack	3,062	1,293,084	.....	.....	3,062	1,293,084
Balasore	1,890	500,000	.....	.....	2,050	525,000
Midnapore	4,834	700,000	1,627	414,400	1,567	212,400
Manbhoom	5,400	1,190,000	2,318	310,612	1,500	281,000
Singbhoom	3,998	289,789	.....	.....	1,250	162,500
Bancoorah	1,300	208,000	1,408	225,280	.....	.....
Burdwan	3,158	1,542,440	.....	.....	.....	.....
Nuddea	3,296	1,011,816	1,152	351,608	.....	.....
Hooghly, including Howrah	2,007	1,890,120	500	482,000	.....	.....
24-Pergunnahs	2,523	1,330,357	168	64,746	.....	.....
Total	34,165	10,544,347	7,173	1,848,646	12,126	2,062,725

* *Note.*—The returns in the above tables, which were compiled from official Reports at the time for the "Annals of Indian Administration," are in some cases avowedly approximate. The actual figures as subsequently ascertained, have been given elsewhere in this volume as far as possible.—The second table "average number relieved daily &c." exhibits actual statistics.

Average number relieved daily from June to December 1866 *inclusive, omitting the Patna and Bhaugulpore Divisions.* [Actual.]*

DISTRICTS.	June.	July.	August.	September.	October.	November.	December.
Pooree	.....	2,844	6,599	9,012	10,846	10,485	.....
Cuttack	1,301	4,789	14,090	27,886	34,704	34,581	.....
Balasore	5,875	14,890	19,231	38,163	36,838	19,252	10,308
Midnapore	5,155	7,442	9,606	8,752	6,476	4,247	.....
Bancoorah (*a*)	Returns not received.	5,000	5,175	8,223	14,818	Operations gradually closed from November.	
Manbhoom	322	1,262	2,831	5,825	9,630	4,253	1,925
Singbhoom (*a*) ...	324	649	649	649	.....	.....	.....
Burdwan	.....	845	1,490	327	90	158	.....
Hooghly	.....	645	3,242	5,700	6,000	4,900	.....
Howrah	.....	.....	.....	1,041	1,041	1,041	1,041
Nuddea (*a*)	2,709	7,580	7,620	535	Operations gradually ceased from September.		
24-Pergunnahs (*a*)	Operations commenced on the last week of June.	264	1,102	3,156	8,862	9,492	Operations closed on the 1st December 1866.

(*a*.) Figures given by the Board of Revenue.

Approximate Expenditure on Relief Operations disbursed through the Agency of Government Officers or mixed Relief Committees to the end of 1866.

	Rs.	A.	P.
Net cost to Government	14,37,889	0	0
Surplus of the N.-W. Provinces Relief Fund	6,06,000	0	0
Amount raised and expended by the Calcutta Committee ...	3,46,516	15	1
Amount of all other subscriptions expended through Committees	1,23,084	0	0
Special grants from the Fund for the improvement of Government Estates	33,404	0	0
Total ...	25,46,893	15	1

ORISSA, GANJAM, AND BEHAR.

APPROXIMATE MORTALITY.

PROVINCE.	Square miles.	Population.	Deaths.	Per cent.
Orissa	7,649	3,000,000	750,000	25
Orissa Hill Tracts	16,068	(say) 600,000	150,000	25
Manbhoom	5,400	1,190,000	148,500	12½
Singbhoom	3,998	288,789	36,098	
Midnapore	4,834	700,000	50,000	
Six districts of Behar	26,191	7,739,717	135,676	12½
Ganjam	6,400	1,129,464	56,262	
Calcutta	.....	.....	6,993	
Bancoorah	1,300	208,000	(say) 14,000	
Hooghly, Howrah, and Ooloobaria	2,007	1,890,120	15,000	
24-Pergunnahs	2,277	1,562,100	1,000	
Nuddea	3,296	1,011,816	1,000	
Total	79,440	19,320,006	1,364,529	

[* The corresponding statistics for the Patna and Bhaugulpore Divisions in 1866 will be found above in Mr. Cockerell's Summary. The corresponding statistics for Orissa during 1867 will be found between pp. 313 and 314.—J. G.]

RELIEF. (ACTUAL)

PROVINCE.	Number relieved *daily* in the worst month.	Spent or Remitted by Government.	From public subscription.	Total.
	October.	£.	£.	£.
Orissa and Lower Bengal	129,305	240,129	107,560	356,089
	August.			
Six districts of Behar ... ,, ...	37,329	7,755	8,616	16,371
	July.			
Ganjam	8,000	60,000	4,650	64,650
Total	175,634	316,884	120,826	437,710

MORTALITY.

North-Western Provinces, 1868-69.—Mr. Henvey's Report, page 126.

Difficulty of obtaining reliable statistics.

It will probably never be possible to collect trustworthy statistics of mortality due to famines. When Government insists that lives must be saved, it cannot expect that deaths from starvation will be freely admitted. The mortality in 1860-61 is believed to have been great. In 1868-69 it is believed to have been small, with the exception of Ajmere. There, as previously remarked, the loss of population caused directly or indirectly by the famine and consequent diseases is acknowledged to have been 25 per cent., or 106,500; the Collector of Bijnour computed deaths from the immediate or secondary effects of starvation at about 3,000 to 4,000; the figures officially returned for Lullutpore and Jhansie are 500 and 218, respectively; while Budaon is said to have lost 564, and Moradabad 300 lives, in the two months of August and September 1869. These figures cannot be near the truth. It is credible that few deaths may have been reported to and by the police as having been caused by actual hunger, but the number of those who died uncared for and unknown, and of those whose weakened constitutions eventually succumbed to the epidemics of fever and cholera, cannot even be conjectured. The official statistics for the year 1869, the first nine months of which comprised the period of greatest pressure, show 529,753 deaths, or 17·9 per *mille* compared with 319,886, or 10·8 per

Deaths in Ajmere.

In other districts.

Official returns for 1868 and 1869.

mille in 1868. But the usual diseases of the country are assigned as the causes of the great majority : 47 per cent. were fever cases, 17 per cent. small-pox, and 13 per cent. cholera. Taking the recorded mortality of the two years in the districts which suffered most, the following results are found :—

Districts in which famine was most severe.

Districts.	Population.	Mortality in 1868.	Percentage of population.	Mortality in 1869.	Percentage of population.
Lullutpore	248,146	3,300	1·3	11,848	4·7
Jhansie	357,774	3,180	·8	20,331	5·6
Bijnour...	690,975	6,634	·9	6,465	·9
Moradabad	1,095,306	14,684	1·3	11,869	1·
Bareilly	1,464,199	18,738	1·2	28,475	1·9
Budaon...	889,810	6,594	·7	9,497	1·
Agra	1,029,760	20,332	1·9	28,527	2·7
Muttra	800,321	11,933	1·4	18,077	2·2
Allahabad	1,303,183	9,221	·6	14,073	1·
Humeerpore	520,941	8,980	1·7	18,727	3·5
Banda	724,372	12,676	1·7	26,742	3·6
Mirzapore	1,054,413	31,493	2·9	15,906	1·4

The table is exclusive of Ajmere. The figures are not cited because they are supposed to be accurate ; but, as observed in the Government Administration Report for 1869, "the proportion of error is constant from year to year, and the results may be used with confidence, when one year is compared with another," and to this extent, at least, the figures are corroborative of the general reports that, where—as in Lullutpore, Jhansie, Hameerpore, and Banda—the increase of deaths in 1869 is most conspicuous, the people were a prey to fatal epidemics which carried off far more victims than the famine. In Bijnour and Moradabad, on the other hand, extreme famine was averred, and the people were otherwise in good health, and here the mortality in 1869 was about the same

Official statistics corroborative of district reports.

as in the preceding year. There can be little doubt, however, that the return for Bijnour in 1869 is very much below the mark. Bareilly, Agra, and Muttra, which show a considerable increase, suffered sharply. Mirzapore, on the contrary, where the mortality fell by one-half in 1869, is one of the districts where at any rate there was the greatest demand for assistance. The explanation may, perhaps, be that the population of Mirzapore, as a whole, was scarcely affected by the dearth, which fell upon the sparsely inhabited tracts to the south and spared the northern and populous pergunnahs. Briefly, then, no estimate can be ventured as to the numbers of deaths caused by starvation, but probably many of the 200,000 deaths, by which the registers of 1869 exceeded those of 1868, may be attributed to disease arising from insufficient or inferior food; and in one case, *viz.*, Ajmere, the loss of population is believed to have been one-fourth of the whole.

No estimate possible of deaths from starvation.

FAMINE FINANCE OF N.-W. P., 1868-69-70.

(Chap. XI of Mr. Henvey's Memoir.)

Charges.

The principal charges incurred by the State, either directly or indirectly in consequence of the famine, may be divided into four parts.

Divided into four principal parts.

First.—The money expended in provision of employment for the laboring poor.

Second.—The contributions towards charitable relief.

Third.—The loss of land revenue remitted in consideration of the famine or suspended with little or no prospect of recovery.

Fourth.—Advances either for the construction of wells and similar objects, or for replacing plough cattle and purchasing seed. This last expenditure is, properly speaking, of a temporary character, though, as in the case of Lullutpore, the recovery of all the money advanced may be doubtful.

I.—Labor Relief.

The following table shows the total expenditure in each district and the daily averages of laborers employed. It also shows the total sum debited to Government either as the imperial contribution towards special relief works conducted by district officers, or as disbursements by the Public Works Department on works conducted departmentally, or as charges on account of miscellaneous relief works such as the cutting of jungle in the Humeerpore district. From this table it will be observed that a total daily average of 80,410 were employed, at a cost of Rs. 18,61,020, towards which Government paid Rs. 13,52,834 and

Share of the Government and Local Funds.

Local Funds* paid Rs. 5,08,185. Deducting amount shown as subsequent recoveries in the Accountant-General's books, the net cost to the State under this head was Rs. 13,37,621 :—

District or work.	Period during which employment was given.	Daily average of laborers.	Cost.	Amount shown by Acct.-Genl. as debitable to Govt., or adjusted by the P. W. Dept., or otherwise chargeable to the State.
			Rs. A. P.	Rs. A. P.
Saharunpore ...	3 month ...	2,948	23,925 5 5	5,000 0 0
Mozuffernuggur ...	10 „ ...	195	6,583 3 7	.....
Muttra ...	11 „ ...	393	15,558 8 3	.....
Agra ...	10 „ ...	410	12,103 1 0	2,758 10 8
Etah ...	7 „ ...	74	1,040 0 3	.....
Bijnour ...	11 „ ...	6,679	1,30,930 15 9	1,13,565 8 10
Moradabad ...	9 „ ...	657	18,989 9 7	8,350 0 0
Bareilly ...	9 „ ...	4,674	43,231 4 5	29,461 11 10
Shajehanpore ...	2 „ ...	483	1,132 0 0	.....
Budaon ...	6 weeks ...	7,000	23,922 6 11	7,922 6 11
Terai ...	2½ months ...	626	5,421 8 1	.....
Futtehpore ...	8 „ ...	2,244	26,241 0 0	4,600 0 0
Allahabad ...	7½ „ ...	2,031	35,773 8 7	2,072 3 1
Jounpore ...	3 „ ...	196	1,413 11 0	.....
Humeerpore ...	9 „ ...	3,466	1,02,374 4 7	.....
Banda ...	6 „ ...	3,259	37,230 13 1	.....
Mirzapore ...	9 „ ...	3,000	1,10,247 0 0	65,400 6 6
Jaloun ...	7 „ ...	1,800	17,533 11 6	8,000 0 0
Jhansie ...	11 „ ...	2,210	71,888 0 0	19,602 8 0
Lullutpore ...	13 „ ...	5,399	2,20,428 11 10½	2,09,518 11 4½
Ajmere ...	7½ „ ...	†4,113	‡1,50,295 3 5	71,765 14 0
P. W. D. works at Moradabad	5 „ ...	2,092	31,380 0 0	31,380 0 0
Agra Canal ...	12½ „ ...	7,187	4,31,185 0 0	4,31,185 0 0
Rohilkhund Canals ...	9 „ ...	4,276	59,594 0 0	59,594 0 0
Meerut Irrigation ...	9 „ ...	839	52,880 0 0	52,880 0 0
Eastern Gangos Canal ...	6 „ ...	4,985	80,341 2 6	80,341 2 6
Timlee Pass ...	6 „ ...	6,402	91,091 7 10	91,091 7 10
Tigree Road ...	7 „ ...	1,636	32,634 0 0	32,634 0 0
Kuchla Ghât ..	7 „ ...	1,136	25,650 14 10	25,650 14 10
		80,410	18,61,020 8 5½	13,52,834 10 4½

* By Local Funds are meant the Road and Ferry Fund, the one per cent. Income-Tax balance, and the funds of Municipalities, local agencies, &c.

† This is exclusive of the numbers employed on Municipal and other local works

‡ This sum includes what was spent on special famine works, as well as those conducted by Municipalities, or from Road and Talao Funds.

II.—Charitable Relief.

Table. The next table contains the daily averages relieved gratuitously, the charges incurred, and the sums specially granted by Government :—

District.	Daily averages.	Cost.	Sums granted by Government.
		Rs. A. P.	Rs. A. P.
Saharunpore	165	2,795 5 11	335 4 2
Mozuffernuggur	142	2,659 2 5	.....
Meerut	.....	9,784 1 1	.....
Bijnour	2,254	45,132 5 2	.....
Moradabad	3,081	14,316 11 3	.....
Budaon	1,654	17,640 0 5	4,472 1 0
Bareilly	300	11,141 10 1	.....
Shajehanpore	2,666	3,735 12 11	.....
Muttra	187	1,868 7 7	.....
Agra	344	8,474 8 10	2,000 0 0
Furruckabad	152	4,716 5 0	.....
Mynpoory	81	196 9 6	.....
Etawah	37	338 0 1	.....
Etah	.....	140 8 0	.....
Jaloun	158	1,115 2 9	.....
Jhansie	2,399	77,833 11 1	2,534 15 8
Lullutpore	2,781	61,442 11 9	.....
Banda	74	749 0 11	.....
Allahabad	269	10,546 10 6	.....
Humeerpore	546	7,903 13 10	720 0 0
Jounpore	31	495 9 2	.....
Azimgurh	148	429 8 7	.....
Mirzapore	128	834 6 3	.....
Benares	1,319	4,790 4 6	.....
Ghazeepore	701	1,593 6 3	.....
Ajmere	1,621	96,886 11 3	24,490 14 10
Total ...	21,238	3,87,560 9 1	34,553 4 2

In Appendix VIII [of Mr. Henvey's Report] will be found three statements; the first exhibiting the sums raised in each district, so far as they are ascertainable, and the amounts remitted by each Local Committee to the Central Committee; the second, the total numbers and averages of persons relieved in each district, the proportions of men, women, and children, the incidence of cost per head, the amount expended, and the mode of adjustment; the third, the cash account of the Central Committee as reported by the Honorary Secretary, Mr. W. C. Plowden.

TRANSACTIONS OF THE CENTRAL COMMITTEE.

The Central Committee worked for 9¾ months, and in that period received and regulated the expenditure of Rs. 2,30,295, or in round numbers £23,030 : of this sum Rs. 67,432-2-8 were remittances from Local Committees, and Rs. 1,62,862-15-5 was the amount drawn

as the Government equivalent of the district contributions. The Rs. 2,30,295-2-1 were distributed as follows :—

	Rs.	A.	P.
Remittances to districts	*2,21,168	9	9
Charges on account of grain sent to Ajmere	5,000	0	0
Miscellaneous and establishment... ...	1,286	12	3
Embezzled by a clerk	905	0	0
Balance ...	1,934	12	1
Total ...	2,30,295	2	1

This statement is based on the Committee's cash account, but later reports show that Bijnour returned Rs. 6,569-3 9, and the Committee re-credited to Government Rs. 6,290-12-2. This still leaves a balance of Rs. 2,213-3-8 unexplained, but probably the difference was expended on the final closing of accounts with the District Committees.

	Rs.	A.	P.
The total cost of charitable relief was therefore ...	3,87,560	9	1
Add cost of grain sent to Ajmere ...	†62,820	9	9
Total ...	4,50,381	2	10
The Government share was—			
Special grants	34,553	4	2
Loss on Ajmere grain	57,820	9	1
Equivalent of subscription	1,62,862	15	5
Total ...	2,55,236	12	8
Deduct amount refunded by the Central Committee	6,290	12	2
Net charge incurred ...	2,48,946	0	6

* There is a discrepancy between this sum and the total of column "sent by Central Committee" in Appendix VIII, No. II. The difference is Rs. 16,147-0-2, and is thus accounted for :—

	Rs.	A.	P.
Returned by Bijnour	6,569	3	0
Remittance to Jaloun not shown in district report	985	0	0
Remittances to Lullutpore not accounted for in district report ...	3,973	2	6
Sum shown as retained by Moradabad Local Committee in district report, but included by Central Committee in remittance of Rs. 6,000 to Moradabad	4,119	1	6
Remittance to Ucharah not entered in Appendix VIII., No. II ...	1,000	0	0
Total	16,646	7	9
Deduct amount sent to Bareilly after closure of Central Committee's accounts	499	7	7
	16,147	0	2

† This is the loss incurred by Government in the cost of importation added to the Rs. 5,000 which the Committee expended as the difference between the price of Gya Pershad's consignment at Rs. 3 per maund and the value at market rates.

III.—Remissions and Suspensions of Land Revenue.

Balances at the close of the year 1868-69.
Table of most important real balances.

The balances* at the close of the revenue year were heavy. They amounted to Rs. 16,63,667 (£166,367), or 4·2 per cent. of the demand for the year. More than £150,000 were returned as in process of liquidation, or as not likely to be recovered. These were therefore real balances, and for the most part, if not entirely, attributable to the bad season.

The most important balances entered as real were as follows:—

District.	Demand.	Balance.	Percentage of balance on demand.
	Rs.	Rs.	
Bijnour	11,13,482	4,03,866	36·2
Moradabad	13,25,231	31,934	2·4
Saharunpore	10,07,358	31,276	3·1
Mozuffernuggur	11,19,760	23,985	2·1
Muttra	16,60,836	28,153	1·6
Furruckabad	11,25,536	28,873	2·5
Etawah	11,99,547	25,126	2·
Jaloun	8,74,520	2,57,256	29·4
Jhansie	4,85,047	1,90,347	39·2
Lullutpore	1,46,478	87,659	59·8
Banda	13,13,324	48,412	3·6
Humeerpore	10,83,891	73,083	6·7
Ajmere	3,80,219	1,39,982	36·8
	1,28,35,229	13,69,952	10·6

But though these balances were real, it must not be supposed that the demand was in all cases formally suspended. It was resolved generally that zemindars in the districts which had suffered from the

* For detail of balances, see Appendix IX, taken from the Board's Revenue Administration Report, N.-W. P.

drought should not be pressed for payment so long as they dealt leniently with the cultivators; and thus many were allowed to fall into arrears. There were, however, as has been mentioned elsewhere, heavy suspensions in Bijnour, in the Ajmere and Jhansie Divisions, and in Banda and Humeerpore. Most of these, as well as the arrears that accrued otherwise than by formal suspension, have now been cleared off: in the Jhansie Division alone do any considerable famine balances (about Rs. 1,13,000) remain. But in some cases it was found absolutely necessary to remit the demand.

Remissions of revenue.

The following is a list of sums remitted:—

	Rs.	A.	P.
Ajmere and Mhairwarra	80,152	8	11
Meywar, Mhairwarra	13,339	6	0
Marwar, Mhairwarra	2,580	0	6
Banda	42,727	1	3
Bijnour	644	0	0
Humeerpore	9,117	14	0
Etawah	8,254	4	3
Bareilly	77	4	0
Jaloun	18	0	0
Kumaon	3,210	0	0
Total ...	1,60,120	6	11

And if to this sum be added about Rs. 46,000 for Lullutpore, and Rs. 10,000 for Jhansie, as balances still due which are not likely to be recovered, the loss on account of Government revenue will be Rs. 2,16,120, or £21,616. From the narrative of events in the Ajmere and Jhansie Divisions, it will have been expected that the remissions of revenue in those tracts would be considerable, but the large sum given up in Banda requires perhaps some further explanation. The absence of facilities for irrigation in Bundelkhund has always necessitated exceptional liberality in times of famine. That country and its people are slow to recover from the effects of drought. It was so after the great famine of 1837-38, and at the height of the drought in 1868-69 the same ruin and disaster were apprehended. When the Banda balances were struck off, no one could venture to anticipate the rapid return of prosperity which ensued upon the rains of 1869, and which in the case of Humeerpore led to a reduction in the amount proposed for remission from half a lakh to a little over Rs. 9,100. It is possible that if more time had been given to consider fully the condition of Banda as affected by the famine, the orders of Government might have been less liberal, and all, or part at least, of the balances might have been recovered, as they have been in Bijnour, where at one time the enormous suspension of over two lakhs was thought to be in reality an abandonment for ever of so much revenue. On the whole, then, it seems that the anticipations of eventual loss under this head were exaggerated, and that the total loss will not be more than £22,000.

Explanation in the case of Banda.

Eventual loss.

IV.—Tuccavee Advances.

The two following tables show—first, the advances made for works of permanent utility in the years 1868-69 and 1869-70, as exhibited in the appendices to the Board's Revenue Administration Reports; and second, the sums advanced for seed and plough-bullocks between November 1868 and February 1870, when the authority to advance for the above purposes without special sanction was withdrawn :—

I.—Advances for Works of Permanent Utility.

Districts.	1868-69.	1869-70.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Dehra	150 0 0	.....	150 0 0
Saharunpore	252 0 0	49,660 10 0	49,912 10 0
Mozuffernuggur	4,720 0 0	7,891 0 0	12,611 0 0
Meerut	15,057 0 0	13,600 0 0	28,657 0 0
Boolundshuhur	.....	14,052 0 0	14,052 0 0
Allygurh	1,075 0 0	4,340 0 0	5,415 0 0
Kumaon	10,000 0 0	.....	10,000 0 0
Bijnour	8,399 0 0	51,183 8 6	59,582 8 6
Moradabad	1,337 0 0	.....	1,337 0 0
Budaon	.....	500 0 0	500 0 0
Bareilly	.....	501 0 0	501 0 0
Muttra	400 0 0	30,327 0 0	30,727 0 0
Agra	625 0 0	15,770 0 0	16,395 0 0
Furruckabad	.....	250 0 0	250 0 0
Mynpoory	1,000 0 0	600 0 0	1,600 0 0
Etah	1,050 0 0	5,600 0 0	6,650 0 0
Jaloun	8,700 0 0	16,448 0 0	25,148 0 0
Jhansie	45,491 0 0	61,415 6 11	1,06,906 6 11
Lullutpore	30,553 6 0	57,231 12 0	87,785 2 0
Banda	2,089 0 0	39,630 12 0	41,719 12 0
Allahabad	4,992 0 0	45,741 8 0	50,733 8 0
Mirzapore	2,136 0 0	6,534 11 7	8,670 11 7
Ajmere	40,420 0 0	34,165 8 0	74,585 8 0
Total ...	1,78,446 6 0	4,55,442 13 0	*6,33,889 3 0

* This agrees with the aggregate of the two years as shown by the Board, though there is a difference in the totals for each year taken separately.

This Table does not include over Rs. 60,000 given to cultivators in the Terai, where the Government is landlord.

II.—*Advances for Plough-bullocks and Seed.*

District.	1868.		1869.											1870.		
	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs. A.	Rs. A.	Rs.	Rs.	Rs. A. P.	Rs.	Rs.	Rs. A. P.
Saharunpore ...	...	...	...	...	...	...	...	...	60	21,539 0	105 0	...	...	1,405 0 0	...	...	23,109 0 0
Mozuffernuggur ...	...	...	...	...	..	...	...	...	279	.....	40 0	...	...	295 0 0	...	...	614 0 0
Boolundshuhur ...	...	...	...	...	...	...	...	...	...	.....	1,662 0	...	...	460 0 0	...	...	2,122 0 0
Meerut ...	...	...	...	...	...	...	...	...	...	.....	.....	...	...	400 0 0	...	...	400 0 0
Allygurh ...	...	...	...	...	...	...	...	...	...	.....	.....	...	...	240 0 0	...	...	240 0 0
Bijnour ...	..	...	...	...	...	...	...	...	...	.....	14,364 4	...	...	18,753 0 0	...	30	33,147 4 0
Budaon ...	...	...	...	...	...	...	...	...	...	.....	.....	...	...	500 0 0	...	...	500 0 0
Bareilly ...	...	...	...	...	...	...	...	...	...	.....	.....	...	...	22,324 0 0	...	...	22,324 0 0
Agra ...	...	...	...	...	...	...	...	...	...	.....	5,576 0	...	...	3,873 0 0	...	...	9,449 0 0
Muttra ...	...	...	...	...	...	...	...	...	...	5,030 2	9,584 0	...	...	10,294 0 0	...	...	24,908 2 0
Etawah ...	...	...	...	...	...	...	...	...	...	.....	23,589 0	...	...	.....	...	...	23,589 0 0
Allahabad ...	...	...	...	...	...	...	...	...	392	6,240 0	2,399 0	...	...	6,028 0 0	...	...	15,059 0 0
Banda ...	...	...	...	...	...	...	...	...	1,441	1,430 12	225 0	...	...	.....	...	...	3,096 12 0
Mirzapore ...	...	2,145 0	...	...	...	...	...	...	...	4,555 0	.....	...	...	.....	...	575	7,275 0 0
Jaloun ...	...	...	...	...	...	...	...	...	...	.....	1,075 0	...	...	3,828 0 0	...	...	4,899 0 0
Jhansie ...	...	...	...	...	...	...	..	...	30	.....	3,300 0	...	...	27,397 7 7	...	...	30,727 7 7
Lullutpore ...	2,285	2,699 14	5,095	4,440	550	600	140	...	...	2,805 0	21,642 0	...	...	28,094 4 0	88	...	68,439 2 0
Total ...	2,285	4,844 14	5,095	4,440	550	600	140	...	2,202	41,599 14	83,561 4	...	...	1,23,887 11 7	88	605	2,69,898 11 7

These last figures are taken from statements periodically submitted by the Board as the advances were sanctioned. But they are exclusive of Rs. 35,046 advanced in the Terai, and Rs. 11,368 in Ajmere. The two tables show that Rs. 9,03,787-14-7, or over £90,000, were advanced, or, including the Terai and Ajmere, more than £101,000.

ABSTRACT OF TOTAL COST.

To sum up the total cost of measures taken under these four principal headings is—

On labor relief	...	Rs.	18,61,020	8	5½
On charitable ditto	...	„	4,50,381	2	10
Loss by remissions	...	„	2,20,000	0	0
Tuccavee advances	...	„	10,16,201	14	7
Total Rs.	...		35,47,603	9	10½
		Or	£354,760		

And the Government share is—

On labor relief	...	Rs.	13,37,621	0	0
On charitable ditto	...	„	2,48,946	0	0
Loss of revenue	...	„	2,20,000	0	0
Tuccavee advances	..	„	10,16,202	0	0
Total Rs.	...		28,22,769	0	0

And if to this be added miscellaneous payments such as—

Compensation to lessees of ferries for exemption of grain from tolls	...	Rs.	25,086
Half* the compensation paid by the Government of India in compensation for the reduction of rates on the East Indian Railway—say	...	„	3,25,000
Total Rs.		...	3,50,086

The grand total will be Rs. 31,72,855, or £317,285.

* Only half is entered here because the Punjab and Central Provinces shared in the advantages derived from the reduction of transit-rates.

Comparison with famine of 1860-61.

The ascertained charges at the last great famine of 1860-61 are shown in paragraph 148 of Mr. Girdlestone's report on "Past Famines," as follows:—

Expended in the distribution of food...	Rs.	5,41,783
Ditto in advances for the purchase of seed and cattle ...	„	3,40,213
Ditto in minor relief works ...	„	29,918
Ditto by Government only in public relief works ...	„	9,14,294
Remission of revenue	„	2,34,646
Total Rs. ...		20,60,854

So that even should the eventual loss of revenue prove less than has been anticipated, the liberality of the measures undertaken in 1868-69 and 1869-70 is conspicuous by the side of those adopted in 1860-61.

Adjustment of charges.

As regards adjustment of the charges, the remissions of revenue are a dead loss to the State, and must be struck off the balance-sheet when sanctioned. *Tuccavee* advances are, of course, supposed to be recoverable. The expenditure on charitable relief, or rather that share of the charges which Government undertook, devolves upon the imperial exchequer. But in reference to the charges for labor relief some difficulty arose, owing to orders received from the Supreme Government to the effect that all that was relief not purely gratuitous must be adjusted against the Public Works Department budget. The Government of the North-West, however, remonstrated against this ruling, and urged in behalf of the Public Works Department that relief works conducted during the distress were under conditions which resulted in a small contribution of effective labor compared with the sums expended. It was said that on the great canal works the principle adopted by Sir William Muir's Government had been to debit the Irrigation Department with a sum representing fairly the value obtained in effective labor, and therefore chargeable to the canal. Again, in district works and roads, the Chief Engineer, looking to the amount of labor that would under any circumstances have devolved on the local funds, had debited the local funds with a fair sum, and charged the rest to the relief fund, *i.e.*, to Government. Lastly, there was the expensive class of works which would not have been taken in hand but for the famine: to these, masses of poor people had flocked in numbers beyond control, and composed of old men, women, and children, from whom no adequate tasks could be exacted. Even in such cases, where possible, debits had been made against the income-tax balances and other local funds. Deducting the above appropriations it was argued that the rest was pure charity, not distinguished from labor in the poor houses, and chiefly of use in sifting multitudes of applicants and providing some test of real necessity. Of such charges there appeared no reason why the burthen should be laid upon the Public Works

Correspondence with the Supreme Government.

Department, and there were no local funds which could legally be devoted to purposes of pure charity. The principle here contended for was admitted in orders of the Financial Department No. 1478, dated 22nd June 1870, by which it was ruled *inter alia* that expenditure on relief of famine, which took place on works carried out merely for charitable purposes, and which were only nominally public works, no appreciable return having been received for money spent, should be adjusted as a civil charge; and, under this ruling, it has since been decided that all charges shown in the Accountant-General's books for labor relief, exclusive of those debited to local funds, or admitted in the Public Works accounts, or met from some special grants, should be so adjusted. The amount deducting recoveries is Rs. 5,34,382-10-3.

Decision finally arrived at.

Comparison of the grain traffic on the East Indian Railway in five years ending 1869.

The quantities of rice and grain carried over the East Indian Railway during the four first half-years preceding 1869, and during the first half of that year, appear to have been—

	Maunds.
First half of 1865	2,046,539
,, 1866	1,113,672
,, 1867	1,673,119
,, 1868	2,843,844
,, 1869	4,376,556

INCREASE OF CRIME.

North-Western Provinces, 1868-69.—Mr. Henvey's Report, pages 126-27.

No attacks on grain-stores or shops.

In times of famine it is usual to expect an increase in the manner of crimes against property. And on previous occasions, the despair of a starving population has found vent in attacks upon granaries, or carts and boats laden with corn. That there was scarcely a single instance of such violent proceedings in 1868 and 1869 is due partly to the arrangements made with the views of averting the possibility of starvation (for when the people saw that Government would give them money to buy food and guarantee supplies of food, they had no inducement to assail the grain-dealers' shops), and partly to the habits of order and respect for law which years of tranquillity and stable Government have created.

Ordinary crime increased. Statistics.

Ordinary crime, however, such as might be expected from numbers of hungry and unemployed men, increased in the most marked manner, as the following figures taken from the yearly Administration Reports will show :—

Year.	Dacoities.	Robberies.	Lurking house trespass.	Cattle-thefts.	Other thefts.
1867	57	274	13,665	10,218	18,699
1868	100	435	17,071	12,196	22,208
1869	122	509	23,297	6,751	32,090

It will be observed that under every heading, except that of "cattle-thefts," there is a great increase in 1869 compared with the returns for 1867. And the result would, in all probability, have been the same with regard to "cattle-thefts" but that a special organization for the suppression of this crime was then in full working.

PUNJAB FAMINE OF 1869.*

STATEMENT No. 2.

AMOUNTS received and expended on account of famine RELIEF, in the districts of the PUNJAB, during the famine of 1868-69, 1869-70.

INCOME.

Subscriptions realized	41,813
Donations realized	1,40,083
Government equivalent to subscriptions and donations	1,49,335
Government grants other than Government equivalents	20,226
Amounts received from Central Relief Committee	1,03,707
Total ...	4,55,166

EXPENDITURE.

Cost of feeding destitute persons	2,54,258
Amounts of pecuniary assistance given to destitute persons	1,66,462
Amounts refunded, &c.	4,472
Amounts remitted to Central Relief Committee ...	11,652
Total ...	4,36,845

BALANCE at the close of the relief operations.

Cr.	18,320
Dr.	.....

Number of DESTITUTE PERSONS relieved.†

Men	19,54,224
Women	23,93,895
Children	18,11,926
Total ...	61,60,045

*Number of ABLE-BODIED PERSONS employed.**

Men	11,77,306
Women	9,00,718
Children	5,06,066
Total ...	25,83,990

LEPEL GRIFFIN,
Secretary, Central Relief Committee.

* [This and the three following statements are abridged from Mr. Griffin's report.]

† [The figures shown against the heads show the entire instances of relief and employment throughout the whole of the months, not a daily average, *i. e.*, the figures enumerate the single meals and the single wages for all the days.—J. G.]

PUNJAB.

STATEMENT No 3.

Statement shewing the RECEIPTS AND DISBURSEMENTS of the "Central Famine RELIEF COMMITTEE," LAHORE, during the Famine of 1868-69, 1869-70.

DR.

	Rs.			Rs.		
To Government grant from the old Famine Fund	75,000	0	0			
„ Interest on "Government Securities" of old Famine Fund ..	10,762	8	0	85,762	8	0
„ Balance of the old Lancashire Famine Fund, Rs. 1,157, with Interest to 23rd April 1869, from Agra Bank, Lahore ..	....			1,213	10	1
„ Government Equivalent to private subscriptions and donations, granted to "Central Relief Committee"	....			7,113	0	0
Subscriptions and Donations.						
„ Amount of Collections from the Kangra District ..	2,638	9	11			
„ Ditto from the Sialkot District	2,000	0	0			
„ Ditto from the Rawalpindi District (by Deputy Commissioner, Rs. 1,030-3 and Assistant Commissioner, Murrie, 452) ..	1,482	3	0			
„ Ditto from the Gujerat District	1,134	5	11			
„ Ditto from the Sirsa District ..	885	12	0			
„ Ditto from the Jhelam District	662	9	0			
„ Ditto from the Shahpur District	529	0	0			
„ Ditto from the Bannu District	509	15	0			
„ Ditto from the Simla District (by Assistant Commissioner, Kasouli) ..	404	6	0			
„ Ditto from the Jhang District	389	0	0			
„ Ditto from the Dera Ismail Khan District ..	340	8	0			
„ Ditto from the Multan District, (by Cantonment Magistrate)	175	13	0			
„ Ditto from the Peshawar District ..	148	8	0			
„ Ditto from the Muzaffargarh District ..	130	0	0			

To	Ditto from the Montgomery District ...	106	8	0			
,,	Ditto from the Rohtak District	70	3	11			
,,	Ditto from the Hazarah District, (by Settlement Officer)	45	8	0	11,652	13	9
,,	Other direct Subscriptions and Donations to "Central Relief Committee," ..				2,646	0	0
	TOTAL RUPEES ..				1,08,387	15	10

CR.

By	assistance given to Karnal District ..	37,300	0	0			
,,	Ditto given to Hissar District	35,572	7	11			
,,	Ditto given to Sirsa District ...	18,500	0	0			
,,	Ditto given to Firozpur District ...	4,500	0	0			
,,	Ditto given to Rohtak District	3,000	0	0			
,,	Ditto given to Delhi District ..	1,200	0	0			
,,	Ditto given to Gurgaon District	1,200	0	0			
,,	Ditto given to Ludianah District	1,000	0	0			
,,	Ditto given to Kangra District	1,000	0	0			
,,	Ditto given to Jalandhar District ..	220	0	0			
,,	Ditto given to Lahore District	114	13	0			
,,	Ditto given to Hushiarpur District ..	100	0	0	1,03,707	4	11
,,	Establishment. — Accountant and Clerk and a Chaprasi for one month		...		995	1	0
,,	Printing *Relief Forms and Envelopes*		...		116	2	8
,,	Cheque-books ...		...		4	1	0
,,	Sundry charges ..		...		1	6	0
	Rs.		...		1,04,823	15	7
	To Balance in hand in the Bank of Bengal, Lahore ...		...		3,564	0	3
	TOTAL RUPEES		...		1,08,387	15	10

LEPEL GRIFFIN,

Secretary, Central Relief Committee.

STATEMENT No. 4.

ABSTRACT Account of the AMOUNTS received and expended on account of DIRECT RELIEF, in the PUNJAB, during the famine of 1868-69, 1869-70.

INCOME.

1.	Subscriptions realized in the several districts for Local and General Relief Funds.—(As per Statement No. 2, Col. 2)	41,813	0	6					
2.	Donations realized in the several districts for Local and General Relief Funds.—(As per Statement No. 2, Col. 3)	1,40,083	11	9					
3.	Direct subscriptions and donations to "Central Relief Committee," (other than the amounts remitted by District Officers from Nos. 1 and 2,) for "General Relief Fund."—(As per Statement No. 3, Dr. Side) ...	2,646	0	0					
					1,84,542	12	3		
4.	Government equivalent to private subscriptions and donations granted to several districts.—(As per Statement No. 2, Col. 4)	1,49,335	6	5					
5.	Government equivalent to private subscriptions and donations, allowed to "Central Relief Committee".—(As per Statement No. 3, Dr. Side) ...	7,113	0	0					
					1,56,448	6	5		
6.	Government grants, other than the *Government Equivalents*, allowed to several districts.—(As per Statement No. 2, Col. 5)	.....			20,226	8	9		
7.	Government grants from the "Old Famine Fund," allowed to "Central Relief Committee."—(As per Statement No. 3, Dr. Side)... ...	75,000	0	0					
8.	Interest on *Government Securities* of "Old Famine Fund," allowed to "Central Relief Committee."—(As per Statement No. 3, Dr. Side) ...	10,762	8	0					
9.	Balance of the old "Lancashire Famine Fund" with interest, made over to "Central Relief Committee."—(As per Statement No. 3, Dr. Side)	1,213	10	1	86,976	2	1		
								4,48,193	13 6

EXPENDITURE.

10.	Cost of feeding destitute persons in the several districts of the Province.—(As per Statement No. 2, Col 8)	2,54,258	3	7					
11.	Amounts of pecuniary assistance given to destitute persons in the several districts.—(As per Statement No. 2, Col. 9)	1,66,462	3	5					
					4,20,720	7	0		
12.	"Central Relief Committee's" *Establishment* pay.—(As per Statement No. 3, Cr. Side.)	995	1	0					
13.	Printing *Relief Forms* and Envelopes, by "Central Relief Committee."—(As per Statement No. 3, Cr. Side)	116	2	8					

14.	Cheque Books (Bank) for "Central Relief Committee".—(As per Statement No. 3, Cr. Side) ...	4	1	0				
15.	Sundry charges, by "Central Relief Committee".—(As per Statement No. 3, Cr. Side)	1	6	0				
					1,116	10	8	
16.	Amounts refunded in the several districts.—(As per Statement No. 2, Col. 10)...				4,472	0	3	
								4,26,309 1 11
	BALANCE IN HAND.							
17.	In the several District Treasuries.—(As per Statement No. 2, Col 13)...	18,320	11	4				
18.	With the "Central Relief Committee."—(As per Statement No 3, Cr. Side)	3,564	0	3				21,884 11 7

* *N. B.*—It is possible that sums may have been disbursed from this balance, in some districts, after the close of the Central Relief Committee's operations.

LEPEL GRIFFIN,
Secretary, Central Relief Committee

RAJPOOTANA, 1869.

GENERAL STATISTICS.

No. 307G, dated 14th February 1871.

From—C. E. R. GIRDLESTONE, Esq., Offg. Junior Under-Secy. to the Govt. of India, Foreign Department.

To—The Officiating Agent to the Governor-General in Rajpootana.

I HAVE the honor to inform you that I have lead before the Viceroy and Governor-General in Council your detailed report on the late famine in the Native States of Rajpootana and in the British districts of Ajmere and Mhairwarra, which was forwarded under cover of your letter No. 1735G, dated the 9th of December 1870.

2. In reply, I am directed to state that the Viceroy and Governor-General in Council has read this report with deep interest. It is a most valuable record of a terrible calamity, rendered still more terrible by the cholera and fever which followed in its track. So severe and wide-spread was the drought of 1868, that not only was it found impossible to cultivate the land, but from want of sustenance the pack-bullocks, on whose loads of foreign grain the country so much depends for an adequate supply of food, even in ordinary times, died in large numbers, and thus importation was brought nearly to a stand-still. Within an area of one hundred thousand square miles the suffering was very great; in parts of the Native States and throughout British territory it was intense. It is estimated that, from Marwar alone, one million persons, or two-thirds of the entire population, emigrated, taking with them more than two million head of cattle. In the whole tract affected by famine, it is computed that one million and a quarter of human beings died from starvation or disease.

* * * * *

4. The sum total which the Government spent for the relief of the population of its own territory, numbering 426,000 souls, was Rs. 15,20,074. This sum is equivalent to nearly three years' gross revenue.

* * * * *

FINANCE.

Rajpootana, 1869.—Colonel Brooke.

Government relief during the famine.

213. The relief works organized by the Public Works Department at the commencement of the famine were on a very extensive scale. In no part of India, perhaps, during any famine was so large a sum of money expended as in Rajpootana, for the relief of so small a population. A bare enumeration of the amounts granted is quite sufficient to show that the officers of the local administration were ever ready to sanction the commencement of works, and the Government of the North-Western Provinces and the Supreme Government to support the local administration by the most liberal grants. Nothing that was asked was denied, and if there was failure anywhere, it did not rest in the refusal of assistance, for the grant of which the greatest solicitude was shown, but in the administration of the funds so freely granted. But I venture to say no failure has been shown, either on the part of Government, or of the local administration. Each individual may have his own views as to how and where relief should be administered, and without impugning opinions, it will be allowed that much latitude must be left to those who are responsible for the disbursement of large sums of public money; and that where the means of supervision are limited, the distribution can only be carried out in a systematic manner, without which it must be ineffectual.

214. The population of Ajmere is 426,000 souls, and the sums expended by Government were—

	Rs.
Famine relief works	7,74,000
Poor-houses	1,03,000
Road poor-houses	[illegible]
District relief works	75,000
Grain from Agra, balance	57,000
Nusseerabad, chiefly buildings	5,00,000
Total by Government ...	15,20,074
Ajmere Road Fund	10,000
Pokur road subscriptions from Native States	25,000
United Presbyterian Mission relief subscriptions ...	69,000
Total ...	16,24,074

The Government of India consequently granted an expenditure of 15¼ lakhs of rupees in a district, the population of which is only 426,000 and the revenue less than Rs. 550,000, or nearly three years' gross revenue. If it be said that Government received a return for this outlay in public buildings and roads, it should be recollected that the usual yearly public works grant for Rajpootana is only about half what was expended on the roads alone. Many of these roads would never have been made, at any rate for many years, had it not been necessary to afford

relief to the suffering. The expenditure at Nusseerabad alone was more than the yearly budget grant, so that at least the whole amount expended on roads may be debited to the famine. Independent however of famine relief, a very large sum must be regarded as a charitable grant by Government.

	Rs.
Loss by famine relief paid to contractors ...	33,000
District relief, exclusive of grain	75,000
Government share of charitable relief	57,000
Loss of grain imputed	57,000
Road poor-houses	11,000
Balance expended by united Presbyterian Mission (to be adjusted)	19,000
Total ...	2,30,000

or a total of Rs. 2,30,000 given in gratuitous relief by Government.

FINANCE.

Central Provinces, 1869.—From Administration Report for 1869-70 by Mr. Morris, Chief Commissioner.

Next to the provision of food for the population generally, the attention of the administration was given to the relief of those unable to work, and to finding employment for the able-bodied. Poor-houses were accordingly opened in the distressed districts, relief committees were organised; and in the month of July a maximum number of about 15,000 persons were fed at the relief stations, besides those for whom private charity provided. The State expenditure on food distribution amounted altogether to Rs. 1,25,341, and private subscriptions expended under the superintendence of Government officers came to at least Rs. 43,998 more. In the administration of poor relief the aid of private individuals was freely solicited and freely rendered, and the retrospect of the whole time of famine is highly favorable to the public spirit and humanity of the people of these provinces. Much that was done by natives for their starving brethren never came to the knowledge of public officers; but the more we learned of their work, the more we had reason to admire the charity, not without organization, which they displayed through the whole crisis of the famine. Cases were constantly coming to light in which some village or township had voluntarily begun and carried out a system of relief for its own poor, and at last district officers abstained from inviting subscriptions from the bulk of the rural population,—not because the response would not have come, but because they felt that the people were doing what they could, and doing it better than any system of Government relief could do it for them.

Side by side with the poor-houses, famine works were started wherever employment was most wanted. Rs. 95,133 were expended from Government grants on these objects, and Rs. 83,129 more from

local sources. Here again the co-operation of private individuals seconded the efforts of Government officers, for landholders, whose means put them in a position to take advantage of the opportunity, turned their attention to the improvement of their estates during a time of cheap and abundant labor. All over the country bunds were repaired, tanks enlarged, and wells deepened; and it is not too much to say that the famine led indirectly to the investment of a large amount of capital in permanent agricultural improvements.

In addition to the means taken to mitigate the sufferings of the time to the people generally, the State came to the aid of the agricultural classes by making liberal advances ("Tuccavee") for the purchase of seed-grain, and to replace plough cattle, the numbers of which had been reduced to a lamentable degree by the want of pasturage and water. In all Rs. 83,533 were thus disbursed, but the people generally preferred to trust to their own exertions, and showed a considerable amount of sturdy independence in refusing to burden themselves with loans, which they mistrusted their capacity to repay.

Such were in brief the principal measures by which it was endeavoured to save life, and alleviate distress during the first six months of the year; and on the whole it may be said that the efforts made were rewarded by success. The liberality and provident care of Government were, it is believed, brought home to the feelings of the people, and it is pleasing to know that they have not been unappreciative of the efforts made in their behalf. The native mind is ever prone to look to Government for support and guidance; and as during the famine the people found their expectations realised, so they on their part showed their confidence in our desire and ability to aid them, by abstaining from agrarian commotion, and from the violent crimes against property which times of distress are wont to induce. There were a few grain riots when the scarcity began, but they ceased as soon as Government relief measures were organized; and the famine shows itself in the criminal statistics of the year only in the increase of petty offences against property, a large proportion of which is certainly to be put down to the starving immigrants who poured over our borders from native States.

FINANCE AND OTHER STATISTICS.

From Mr. Girdlestone's Memoir.

Remission of Revenue is the best means of alleviating distress.—Such then being the present difficulties in connection with importation of food, what course remains open to Government when it is convinced that famine is near at hand, and is desirous of alleviating the distress which it cannot wholly keep off? The remedy was clearly recognized by Mr. Rose (Collector of Cawnpore), after the events of 1837-38, and as clearly described:—

"One of the errors of Government," he wrote, "was in not being sufficiently explicit and early in making known to the people the extent of negative relief intended to be granted by means of remission of revenue. It is true little or nothing was collected by Government until the rubbee harvest was ripe, and the people were early told that they were to expect leniency; but the Collector unfortunately could not tell them what amount of remission it was intended to allow; and whilst he was prosecuting his inquiries to determine that point, the malgoozars,

never before having experienced or ever heard of such sweeping remissions as were ultimately granted, and expecting in their most sanguine hopes nothing beyond a remission of ten or twenty per cent. of the revenue, continued to press their ryots for the rents,—thus driving away thousands who, if unmolested, would have remained in their villages, and by means of artificial irrigation would have raised a sufficient rubbee crop to subsist on.

"Should, therefore, the country be ever again visited with a similar calamity, I would recommend, as a first step, that the total suspension of all demands for the November and December instalments be proclaimed, provided the malgoozars adopted the same course towards their cultivators; and that the duty of the tehseeldar and Collector should for the time be limited to ascertaining how far the malgoozars adhered to that provision, and taking, of course, when they deviated therefrom, a fair proportion of the rent exacted by them from the cultivators.

"When the rubbee harvest come into the market there would be ample time to commence to determine what each mehal should pay; nor is there any danger that such a course would cause undue loss of revenue. The scramble between the malgoozar and tehseeldar to forestall each other in getting hold of the rents would cease, and instead of a desire to exact all he could out of the ryot, the malgoozar would be impressed with the conviction that the lighter he dealt with his cultivator the more leniently he himself would be treated by the Government.

"After four years' official acquaintance with the zemindars of this district, I am bound to say that, with the exception of a few Rajpoot communities, they are never backward in paying that portion of revenue which can fairly be demanded from them. The principle of looking to the land, instead of to the person and effects of the malgoozars for the revenue is now so well understood in this district that I believe in a very few years process of imprisonment and distraint of property might be entirely abolished, without any additional difficulty in realizing the revenue, and without any increase in sales or transfers."

The plan of course has its disadvantages, but there seems no reason why, with proper care, they should not be overcome. The subject occupied the attention of Mr. (Sir) W. Muir when he was settling the Calpee pergunnahs, and he pointed out both the evil and its cure at the time:—

"When remissions are granted on such emergencies," he observed, "the usual plan adopted has been to call on the tehseeldars to furnish detailed estimates of the produce of the year, and upon them to found a limited demand. This system gives full scope to the malpractices and intrigues of the native officers, who on such occasions are found to attend to their own interests as much as to those of Government or the people. The remissions granted in the district in the drought of 1834 were most liberal, but it is proved that they greatly failed of their effect through the gross venality of the subordinate authorities.

"Now, whether we look to the extreme facility with which such transactions can be carried on without exciting suspicion, or to the extreme difficulty of obtaining proof sufficient for conviction when they have reached our ears, or to the irresistible temptation to indulge in them which must overwhelm most natives from a combination of both these circumstances, the more desirable does it appear to procure some standard which we can use in place of their opinion. And it is obvious that it would be more for the advantage of Government, in making use of such standard, occasionally to err a little too far on the side of remission, than by trusting to the native officers to make them sharers in benefits intended solely for its suffering subjects; for in the last case the reductions, to produce an affect equal to those in the first, must include a separate charge—that of corruption, which if they do not include, as the native officers will seldom let go their prize, the result will be the ruin, in a greater or less degree, of the country affected. In the first case, again, even if the abatement be greater than the occasion calls for, still all of it is applied to its proper object, and at the worst can never fail of benefiting those for whom it is intended, of warding off the effects of famine, and of adding to the prosperity of the country.

"A standard such as that alluded to above it is possible to obtain in Bundelcund. Want of rain affects each of the different soils in a different degree, and as the classification of the villages is based on that of the soils, it follows that the different classes of villages are affected by drought in a manner that can be previously ascertained. Upon this principle, I have with great care prepared a scale by a collation of statements from the canoongoes, tehseeldars, and other experienced officers and intelligent natives; and though of course, I cannot pretend that it is perfect, I am certain that it approximates to the real effects which accompany the different degrees of drought.

"Whether the particular famine to which the standard is to be applied belongs to the first, second, or last degree of intensity, must be judged of by the Collector;

and it will often happen that while one pergunnah, or even division of a pergunnah, is affected by one degree, by another may be affected, a different. It would be most desirable that the record of meteorological phenomena obtained from the observations of the rain-gauge (directed in the Board's fourth Circular to be erected in every tehseeldaree and thannah) should be placed parallel with the effects of different years on the produce of the soil, and that their mutual bearings in each of the different gradations of famine should be correctly ascertained. Such an induction of facts might thus be secured as to reduce to an almost infallible rule both the general principles on which remissions should be founded, and the mode of their application in particular seasons and places. Meanwhile I beg to suggest whether it would not be more politic, in a country so liable to severe drought, to adjust remissions according to the following scale, than to trust to those unconnected estimates of tehseeldar, which not only are founded on no uniform rule, but give birth to many evils and abuses:—

Class of Villages.	Demand per cent. on the Government Jumma.		
	In a drought of moderate intensity.	In a drought of great intensity.	In a drought of extreme intensity.
Kuchar	84	50	22
First	80	50	18
Second	70	35	12
Third	60	24	7

"Two remarks must be here made. The volume of the jumma is not invariably affected by drought, or in proportion to it, for it depends on the fall of rain beyond the country. But when the stream flows unabated the fertility of the *turree* lands is unimpaired; the value, indeed, in scarcity, is increased by the rise in prices. In this instance an exception would be made from the scale, and remissions would be granted only in proportion to the cultivated area which was beyond the influence of the river. The case here supposed would be a matter of notoriety—not such as could be garbled and concealed from a Collector who should avail himself of ordinary inquiry; and the measurement papers would render it difficult for the native officers to mislead regarding the portion of an estate which should be subject to the rules of remission and that which should not. The tributaries of the jumma are less independent on the local rains, and I apprehend that the scale would apply with correctness to the villages on their banks.

"*Secondly.*—A *total* suspension of rain, if such should occur, ought undoubtedly to be followed by a total suspension of demand. I again except the Kuchar villages, from which, if the flood were not much diminished, a demand of one-tenth might, even in such seasons, be made. If in like manner, after a total suspension of rain in the regular season, a fall of some duration should occur in the month of December, the produce of the first-class villages would justify the collection of a similar proportion. These observations are introduced chiefly to show that the general adoption of the scale would in nowise interfere with particular instances in which the Collector recognized peculiar and extraordinary grounds for departing from it.

"The scale for Koonch would, from the preponderance of *mar* and the humidity of its soil, vary thus:—

Class of Villages.	Demand per cent. on the Government Jumma.		
	In a drought of moderate intensity.	In a drought of great intensity.	In a drought of extreme intensity.
First	80	64	22
Second	80	52	16
Third	72	42	12

"But the arrangement would exhibit a serious defect were it to make no provision for the ryot. The first-class villages are not composed entirely of *mar*, nor the third entirely of *rakur*; and, as the productive power of each field depends not so much on the class of village as on the species of soil, the latter must regulate the demand. I propose, therefore, that the same indulgence granted to the zemindars should be extended by them to their ryots, that they should be instructed to collect according to the annexed table, and that no claim beyond it should be upheld in a summary complaint:—

Soil.	Demand per cent. on the rent usually by the ryot.		
	In a drought of moderate intensity.	In a drought of great intensity.	In a drought of extreme intensity.
1. Mar	87	65	23
2. Kabur	75	38	16
3. Purwa	70	30	14
4. Rakur	48	17	5
5. Turee	100	72	35
6. Cuchar	92	53	22

"The observations in paragraph 139 apply to the first, fifth, and sixth soils, and specially to the *turee*, the rents of which, as long as the stream is full, need not be abated.

"The subject being one of difficulty, it is with great diffidence that I put forth the above remarks. It cannot, however, be doubted that the *principle* is a just one, and, if judiciously set in operation, would be attended with inestimable benefits. In addition to the advantages of security and confidence, and the exclusion of bribery, there is another, scarcely inferior, which I think would be secured. When collection is made of every farthing which can be extracted, the proprietor has no object in avoiding, to the utmost of his power, the effects of the drought; his constant aim is rather to depreciate his village, that he may gain a greater abatement. But if the demand were uniform and fixed, this indifference would be supplanted by all the inducements of self-interest; his mind, set at ease as to the amount to be exacted, would turn with vigor towards the preservation and improvement of his estate; in a word, instead of cavilling about remissions, he would make the most he could of a bad season."

The practice of remissions is, strictly speaking, against the letter of the law, for the theory on which our present system of assessment is based is that of fixing a moderate average demand for a long term of years. "The Government agrees to relinquish the excess in a good year, and it is fair to expect that the deficiency of a bad year should be made good from the accumulated surplus of past or the anticipated surplus of coming years." But practically this rule has been more honored in the breach than the observance. Like the Bank Charter Act it has often had to yield to stress of circumstances, and whenever it has been set aside in time the relief has been speedily apparent. It at once checks emigration, and herein lies its expediency. If the ryots can be kept in the neighbourhood of their villages during the period of famine, it is evident that the country will recover more quickly from its exhaustion, for their labor is available on the first fall of rain.

The fear of consequences when they have fallen into arrears has been as much the disposing cause to emigration as hunger, and therefore the announcement that Government will remit its demand is the plainest proof to the poor man that it has a fellow-feeling for him in his trouble. So attached is he by nature to the soil, so difficult to move from the home of his fathers, that this token of sympathy is generally enough to make him remain steadfast to his land. If public works of relief are instituted, he has an additional reason for staying. The ruin that the absence of such men causes is matter of history. Within a year after the famine of 1803-4, many estates in Cawnpore, though put up to auction, came back upon the hands of Government for lack of purchasers, and were consequently managed at a loss. No speculator would buy the land because he has no certainty that he could find laborers to cultivate it. The same thing happened again in 1838. Concerning Etawah Mr. Martin Gubbins wrote in 1841*:—"That the population has been very sensibly reduced by death is abundantly evident from the still deserted houses and abandoned lands, as well as from the general fall of rents throughout the district. This latter fact sufficiently indicates the competition, not of cultivators for land, but of landholders for cultivators." For the same reason the transfers of ownership in landed property were numerous in Allygurh and Boolundshuhur, and the rates of purchase-money very low. There is no need to multiply instances. What I have cited is sufficient to give an idea of the loss in revenue alone, not to mention in agricultural produce, which must ensue after a famine, if the means are not at hand to till the soil.

North-Western Provinces, 1868-69.—Mr. Henvey's Report, pp. 8-9.

Remissions and Advances.

Two other modes of indirect relief have been mentioned—the remission of land revenue and the system of *tuccavee* advances.

Remission of land revenue.

The theory of the North-Western Provinces settlements is that the Government demands has been fixed at such a moderate amount as to leave a margin from which the losses of bad seasons can be met. But in practice it has been found impossible to insist upon the full liquidation of the Government dues when the harvests are wholly destroyed or seriously injured: such a course would bring general ruin upon the agricultural classes, who are the backbone of the country. Remission of revenue has, therefore, been recognized as a principal means of mitigating the injury caused by famine. On the occasion of the last famine in 1860-61, Government is said to have given up more than £20,000.† The same liberal policy was adopted in 1868-69. Large remissions were granted in Ajmere, Banda, and Humeerpore, and still more considerable sums were suspended in the Jhansie and Rohilkhund divisions. In the orders passed on the Board's Administration Report of 1868-69, it was estimated that, taking into account the sums actually remitted and those that

This kind of relief necessary in times of famine.

Official computation of the probable loss of revenue.

* See his Settlement Report, para. 43.

† *Vide* Mr. Girdlestone's Report on the Past Famines, page 90.

were not likely to be recovered, Government would lose about £40,000. Further particulars as to the amounts remitted and suspended in each district will be given in the Financial Chapter.

Ordinary *tuccavee* advances.

Tuccavee advances for the construction of wells, embankments, and watercourses are common in ordinary seasons. The money is advanced without interest, and is repayble by instalments extending usually over three years, on the security of the landed estate of the person to whom the advance is made. But in times of famine it has been usual to extend the system, and to permit advances for the purchase of seed and plough-cattle. In 1860-61, nearly £35,000 were expended on this account. Such advances are of the utmost advantage to the cultivators. One of the first and most fatal effects of drought is that fodder fails. Then the cattle either perish of hunger, or are sold at nominal prices to butchers, or are driven off to the *khadirs* of the great rivers or submontane forests, where thousands die of disease engendered by eating grasses to which they are not accustomed. If a farmer loses his plough-cattle, and is too poor (as he very often is) to replace them, the land must lie waste; or if he goes to the village money-lender, he must borrow at exorbitant interest. And similarly with seed-corn. The peasant rarely has a store of grain from which he can draw when a harvest is lost. He depends on the village *bunyah* or grain dealer for advances in kind, which are generally made on the understanding that at the next harvest they will be repaid with interest. But occasionally it happens that the supplies are so slender, or the dealers so apprehensive of further failures, that scarcely any rate of profit will tempt them to advance seed to the cultivators. In the latter case, the land must remain unsown; in the former, the land is sown, but the cultivator too frequently is involved in ruinous embarrassment. Whether, therefore, in replacing plough-cattle or in buying seed the benefit of Government advances, free of interest and repayable on lenient terms, can scarcely be overestimated. Details to be given hereafter will show that the Government of the North-Western Provinces disbursed over £100,000 as *tuccavee* in the two years 1868-69 and 1869-70. Of the above sum, more than £30,000 were given for plough-cattle and seed.

Extension on occurrence of famines.

Ruinous effects of the loss of plough-cattle.

Failure of seed-corn.

Benefit derived from such advances.

Amount disbursed by the Government of the North-Western Provinces.

INFORMATION ON THE LOSS IN CATTLE AND OTHER AGRICULTURAL STOCK.

LOSS OF CATTLE.

North-Western Provinces, 1860-61.—Colonel Baird Smith.

26. A loss that is likely to tell more heavily on the farmers than even the temporary loss of manual labour, is the loss by death of their plough and well bullocks. The scale of their loss has been very large, and it is increasing day by day. From every section of the famine tract I receive intelligence of growing mortality among these animals, and the gravest fears are expressed in consequence. In the Meerut district it is believed that fully one-half of the farming cattle have already died, and it is known that the rate of mortality is increasing. Such a state of things implies great paralysis of work in the bad tracts, whatever the nature of the season may be, and may well cause very deep anxiety. Ordinarily, the farmer maintains cattle for his wells and ploughs with other work, at the rate of about one pair for each four acres under cultivation, and as the section of the Meerut district, over which the drought has almost annihilated the crops, is about four-tenths of the whole, the total number of bullocks for farming purposes at the beginning of the pressure was probably about 80,000 pairs. Of these 40,000 pairs, more or less, are reported to have gone, and of the remainder the mortality is now said to be greater than ever. Even the loss believed to have been already sustained, however, in this single district, cannot be replaced, but at an outlay of at least Rs. 10,00,000 or £100,000.

As very nearly the same general proportion of bad tracts to good runs throughout the central section districts, the loss to the agricultural community there in cattle only can scarcely be less, and may possibly be more than about 50 lakhs or £500,000.

In the eastern section, the loss is probably much less from the large extent of forest or river valley pasturage available, but in the western section where no such advantages exist, the mortality has been even greater than in the Doab, and the accounts I have received from Delhi districts are truly deplorable, as the increasing losses of cattle there are described as causing extensive abandonment of villages by the people. The entire loss, therefore, from this cause is not likely to fall under about 75 lakhs of rupees, or £750,000.

These men and the sufferers who still cling to their villages, have fought their fight bravely and well, and I earnestly hope that some help may be given them in such forms as will be most effectual in helping them to help themselves. Nothing could do so more effectually than aid in replacing their lost cattle, or in general help towards the resumption of their usual work, and the central relief committees could not better do their work, in my judgment, than by coming forward to lighten this crushing burden.

Colonel Baird Smith's Estimate of the Loss in Agricultural Produce:—

"The total loss of agricultural produce in the Central Section may therefore be approximately calculated at from 90 to 100 lakhs of rupees, or £900,000 to £1,000,000. To a very large section of the people in the famine tract the loss has been absolute, as the small

patches of cultivation they may have been able to maintain would barely suffice for their own sustenance.

"Turning now to the Eastern Section I find that the actual loss of produce in the Moradabad District is estimated at nearly four millions of maunds,—an ordinary year's production being about seven millions, and that of the present year only three. The numbers indicate a loss of property to the community during the famine period of nearly 40 lakhs of rupees, but that loss has not fallen wholly on the district, inasmuch as the smaller quantity of produce obtained has been sold at famine prices, and the actual loss is about twelve lakhs, or £120,000. This loss has, however, been very unequally distributed, and the bad sections have in reality suffered to a much graver extent than this average statement would indicate. Their great loss has been balanced by the greater gains of their neighbours in the better sections, and about 20 lakhs, or £200,000, would probably be a moderate estimate to make of the loss in the aggregate area of the worst section of the district. Bijnour might similarly be taken at 12 and Budaon at 15 lakhs, making the whole loss for the Eastern Section between 45 and 50 lakhs, or from about £450,000 to £500,000.

"In the Western Section, and more especially in its southern parts, I fear the loss will prove to be much greater. I have not yet the means of making any estimate for the part north of Paneeput, but south of Delhi fully two-thirds of the area cultivated in ordinary years has failed this year to yield any produce at all. The loss thus sustained throughout the four southern districts or parts of districts may be computed at about 60 lakhs, or £600,000. The northern districts will raise this to about £800,000, but I doubt much if this represents the full loss west of the Jumna, as, though not so hard pressed as the others, I am aware that in Rohtuk, Hansi, and Hissar, serious losses have been caused by the drought.

"If the aggregate of these losses throughout the famine tract be taken at three millions sterling, it will, I believe, be under the truth, and a verification of the approximate accuracy of this estimate may be obtained from independent consideration."

North-Western Provinces, 1868-69.—Mr. Henvey's Report, page 125.

Disastrous effects of such losses.

Another of the disastrous consequences of a famine in this part of India is the loss of plough-cattle. When grass fails and the slender stocks of fodder are consumed the cattle die or are sold to butchers. Then the plough lies idle in the fields. This, in its influence on agriculture, is perhaps a more serious and lasting evil than the loss of population. For as a rule (at least in recent famines in the North-Western Provinces), those who die of hunger must be the old or helpless, while the able-bodied and useful escape. But if the cattle perish, cultivation is practically impossible. Here, again, figures can be given, but they must be accepted with caution, as at the best but an approximation to the truth :—

Approximate figures.

Districts.	Cattle lost by death, sales, &c.	Percentage on stock.
Ajmere ...	171,648	59
Jhansie ...	150,000	50
Lullutpore	102,603	44
Jaloun ...	.....	40
Saharunpore ...	255,433	29
Muttra ...	103,921	20
Agra ...	105,932	22
Humeerpore ...	85,335	20
Bijnour ...	*31,000	11
Etah ...	35,000	11
Moradabad	60,000	10
Banda ...	50,122	7
Total ...	1,160,994	.....

* In three pergunnahs.

Supposing that 500,000 pairs of plough-cattle died or were sold, this would represent at a very moderate computation a loss of £500,000, and a power of cultivating not less than two millions of acres. But, with the exception of Ajmere, Jhansie, Lullutpore, and Humeerpore, the returns are probably exaggerated. In Ajmere the mortality among cattle may well be supposed to have been very great; in Jhansie and Lullutpore fodder failed to a lamentable extent, and the consequent destruction of cattle is felt at the present day in the decline of cultivation; and in Humeerpore a very fatal murrain swept away thousands. However, making allowance for exaggeration in return from other districts it cannot be doubted that in this respect the consequences of the drought of 1868-69 were most calamitous and the advances sanctioned for purchase of agricultural stock (which, including seed, amounted to only Rs. 3,16,313) can have gone but a little way to replace the damage done.

Computation of loss sustained.

Some of the returns exaggerated.

But the deaths must have been numerous.

Rajputana, 1869.—Colonel Brooke's Famine Report.

5. Excluding the fertile portion of Marwar enclosed within the branches of the Loony, nearly the whole country to the north-west of this river, comprising the western portion of Marwar, the States of Bickaneer and Jeysulmere and Shekawattee, and covering an area of about 65,000 square miles, is a vast sandy semi-desert. As we recede westward from the Aravalli, the distance of water from the surface increases, till in Jeysulmere and Bickaneer it is at a depth of 3 to 500 feet. Irrigation from wells is of course impossible (well irrigation not being profitable at a greater depth than 75 feet), and the population have to depend for their supply of grain entirely on the produce of the crops sown in the rainy season, which in this part of the world is very uncertain.

Stock in the agricultural desert tracts.

6. The rain sinks into sandy soils, and does not flow off the surface, so that a very small rain-fall suffices for the crops. When the rainy season commences the sand-hills are ploughed by camels, and the seed planted very deep in the ground. After it has sprouted, a few showers at long intervals bring it to maturity; and as the light-built desert camels walk quickly, each householder is able to put a large extent of ground under crop. The produce in a favorable season is much more than is necessary for the wants of the population, whilst unfortunately the means of storing the grain are difficult to be got, as burnt earthen vessels for the purpose have to be brought from long distances. The surplus produce is therefore frequently left on the ground to be eaten by cattle. The kurbee or bajra stalks, which make excellent fodder for cattle, are little heeded in good years, when rich grass is plentiful. Generally speaking, neither the kurbee nor grass are cut or stacked as a stand-by against bad seasons.

7. Bajra (*penicillaria spicata*) and mote are the only crops which are grown in the desert. The former is planted as early as possible, even in May, should any rain fall in that month; the latter in August.

The former takes three months, the latter six weeks, to ripen. Besides these cereals, large quantities of melons spring up, of which the Bickaneer melon is famous. The melon supply food for a considerable portion of the year, and, when abundant, are allowed to be plucked by any passer-by, and even the cattle are fed on them. The seeds are dried and ground, and mixed with flour for food.

Cattle of the desert.

8. The great wealth of the desert lands of Marwar and Bickaneer consists in the vast herds of camels, horned cattle and sheep, which roam over these sandy wastes, and thrive admirably in the dry bracing climate. The camels and horned cattle are bred in such numbers that they supply the neighbouring provinces. What are called Guzerat cattle and sold as such are in reality Marwar cattle of the celebrated Nagore breed. Single households possess hundreds of these cattle, and some large dealers several thousands. The grass in the desert is of an exceedingly nutritious description. The cattle are almost wild and in excellent condition, but, when taken out of the country, languish and get thin, unless supplied with grain and condiments to make up for the loss of the rich grasses on which they have been accustomed to feed. In Marwar alone, before the famine, there were at the very least 2,250,000 heads of horned cattle; including Mullanee; the number may be stated at 3,000,000. The produce is yearly sold at the great fairs of Pokur, Tilwarra, &c. Large pairs of bullocks fetch from Rs. 150 to 400 per pair, and smaller ones Rs. 40 to 80 per pair. Ghee is exported to Scinde and Guzerat, and supplies the bazaars of Ahmedabad and Baroda.

9. The camels in Bickaneer, Jeysulmere, and Marwar are also kept for the sale of their produce. The Bickaneer camel is the finest, handsomest, and swiftest in India. The Marwar camel is the most enduring, but not equal to the Bickaneer in speed. The Jeysulmere camel is a dark, small, ugly camel, but very docile, and the easiest of any in its paces.

10. The sheep of Marwar and Bickaneer are exported largely to our military stations, and great numbers are transported for the supply of the Bombay market.

Wealth of the desert tracts.

11. Thus, it will be seen that the wealth of these desert lands is considerable, though they are in appearance barren. The partners in the great Marwaree banking firms, who trade and speculate at Calcutta and Bombay, have their homes at the capitals of the Desert States, and enrich the country by the wealth they bring and the charity they bestow. The ryots of the desert have not many wants, nor the means of gratifying those which they have, and as their cattle are a great source of profit, they are well-to-do in the world, and accumulate wealth rapidly, which they partly bury and partly display on the persons of their wives. When, therefore, the country has been at peace for any length of time, and the rain crops have yielded harvests above the average, the balance of trade is in favor of the desert lands, and the currency (the Bijjey Suhae rupee) is at a premium of 3 or 4 per cent. when compared with the British rupee.

Marwar, 1868-69.—Colonel Brooke.

(RAJPOOTANA ADMINISTRATION REPORT FOR 1868-69.

11. Besides the loss of population, the loss to Marwar in the destruction of its great mainstay, its cattle, is dreadful to contemplate. Marwar, over its greatest extent, is essentially a pastoral country. Large herds of magnificent horned cattle of the species used for native Ruths and Bylees, and called Nagore cattle, from the name of the principal place where they are bred, roam over its vast plains, which yield a peculiarly nutritive, perennial grass. In the dry climate and on a soil peculiarly suited to them they thrive and increase rapidly, and the young are sold at the annual fairs at Purbutsur, Pokhur, and Tilwarra, where they realize large prices—for unbroken cattle, from Rs. 80 to 250 a pair. They are consequently a source of wealth and prosperity to the country. They require cleanliness and good feeding, and when they leave their own native pastures, unless they are carefully tended, they die in great numbers. Their peculiar constitution, therefore, was not able to resist the scanty and miserable fare to which they were doomed during the famine, and therefore the loss in this species of cattle has been very large.

12. There are about 4,500 inhabited villages in Marwar; and if we reckon 1,000 head of cattle per village, or even 500 (when we shall be very much within the mark), we shall have 2,250,000 head of horned cattle for the country. All these, with the exception of about one-tenth, were taken out of Marwar by the departing emigrants. Two millions at least of cattle and three quarters of a million of human beings poured in great floods over the neighbouring countries! Where, however, are now the cattle? The tenth which remained behind may be said to have died off. The masses of bones round the villages and the few walking skeletons left attest the frightful mortality. An almost equal mortality appears to have followed the herds. Those that went to Malwa suffered fearfully. The emigrants to Guzerat and Radhunpore have lost most of theirs, and when to these are added the numbers which have been sold for a mere trifle for the purchase of food, I do not think I shall be exaggerating when I say that the wealth of the country in its horned cattle will have been reduced to one-fourth what it was at the same time last year,—a loss which, I believe, is unprecedent.

Marwar, 1869.—Colonel Brooke's Rajputana Famine Report.

Effect of scarcity on the cattle.

71. From the wide extent of the famine tract, however, and the distance the emigrants had to travel, the cattle were soon reduced to skeletons. Moreover, they would not thrive on the poor herbage of other countries, after the rich grasses which had been so congenial to them at home. Their poor owners did not like to see them starving, so offered them for sale for a trifle, keeping, however, their plough bullocks, which they fostered with great care to the last. Splendid young milch cows were to be had for one rupee each, but at the worst periods, when their owners were starving with hunger, a pair of bullocks was not to be got under Rs. 10.

72. Those that went early to Rutlam and Malwah fared the best. They soon reached good pastures and a country where grain was comparatively cheap. The route they travelled by had been also favored with rain. Those who sought a refuge in Guzerat were disappointed. That province had been swept by the great cyclone of August, as before remarked, which was followed by no after rains. The young grass on the plains was still covered with alluvium, and that on the high lands was quickly trodden down by the innumerable Marwar herds. Those that came late found a desert, and some even returned to their homes, as they said they might as well die in their own villages as in a strange land. The emigrants who reached Guzerat and Kattywar survived with difficulty. Those who crossed over to Scinde were cared for by Lieutenant-Colonel Tyrrwhitt, the active Superintendent of Thur Parkur, but neither here nor at Jeysulmere would the grass agree with the cattle. The same may be said of other directions which the emigrants took. The further they went from Marwar the better off they themselves fared, but the greater was the mortality amongst their cattle.

73. There are about 4,500 inhabited villages in Marwar. Many of the great graziers towards the desert, like Job of old, own thousands of heads of horned cattle. If we reckon an average of 500 per village, a very low estimate, we shall have 2,250,000 heads for the whole country. With the exception of about one-tenth which were week and feeble, and on this account left behind, the whole of these vast herds were driven out of the country.

Progress of famine in Mullanee.

74. Mullanee suffered equally with the rest of Marwar. With the exception of about half a dozen hamlets, the whole tract belongs to Thakoors, offshoots of the family of the Jodhpore Maharajah. They not only own a great number of cattle, but breed one of the finest and most enduring races of horses in India, which are at the same time both high spirited and tractable. The produce they sell yearly at the great fair of Tilwarra near Bhalotra, and this forms a principal source of their revenues. On the approach of the famine the Thakoors sent their horses to their connexions in Guzerat and Jeysulmere. The change of forage seemed to agree with the horses as little as with the cattle, and about three quarters of the breeding stock died. It would be supposed that horses would not have been afflicted in the same way as cattle. They may have required grain on a change of pasture, but it is not improbable that there was a murrain both amongst cattle and horses, aggravated as in the human body, by insufficient food and bad water, which caused so great a mortality.

Marwar, 1869-70.—From Colonel Brooke's Administration Report for 1869-70.

7. On the 19th July the rains at last set in, but in many places too lightly to moisten the earth sufficiently for agricultural operations. At Jodhpore itself none fell till September 9th. Towards the end of July the falls became more general in the country, and the spirit of the people revived. *They had lost their cattle, and had no plough*

bullocks; therefore, making small ploughs expressly for the purpose, they yoked themselves in place of their oxen, whilst the women dropped in the grain as the men laboriously turned the furrow. Only one ploughing to the soil was given by these poor half-starved people; and then thorns in place of harrows were dragged over the furrows to scratch the earth over the grain. So precious were camels and bullocks at this time, that in Mullanee Rs. 3 a day was the rate of hire for a camel ploughing, and Rs. 4 a day for a pair of bullocks. *Thus energetically did the Marwar population try and retrieve the dire visitation which had fallen on them.*

8. *With all these great exertions, they managed to sow a breadth of land almost equal to half the usual quantity—a result most astonishing when the slender means at their disposal and their reduced state is considered.* The grain sprouted splendidly, and all were in hopes that the famine had at last passed away; and that with the harvest would be ushered in a season of plenty and contentment, when another scourge was sent on the already afflicted country. Dense broad streams, several inches deep, of dusky-coloured insects, like minute grasshoppers about the size of ants, made their appearance. They were produced from the eggs of swarms of locusts, which had entered the country about the end of May from the direction of Jeysulmere, and had settled in various localities, each of 20 or 30 square miles in extent. They moved backwards and forwards steadily over the face of the land, regardless of all obstructions, and destroyed every green thing in their course. As they increased in size they became more ravenous in their appetites, and when they got their wings and could fly, more ubiquitous. Great clouds of them were daily seen seeking what new spot they could find which had not been previously devastated by other flights. They took their daily flight as the sun became warm In the afternoon they settled on fields of ripe grain to allay their insatiable hunger, and changed the colour of the green land for many square miles to their own pinkish hue. When the morning arrived they took their flight, and left the place where they had settled bare earth and skeleton trees. They disappeared about the end of October, when the public prints mentioned that the Steamer *Euphrates* had sailed for three days between Aden and Bombay through swarms of them. In September I calculated the injury to the crops in Marwar by locusts at 50 per cent. of the produce. The swarms had then only just commenced to fly; but before they finally left the country 75 per cent. of the crops over the small area sown was lost to Marwar. Another famine season stared the people in the face, and numbers were again compelled to emigrate.

9. The real period of intense suffering from want of food had however passed. In 1868 the wild grasses had afforded no food, as there had been no rain; but in 1869 the grass crop was most luxuriant, whilst there were no cattle to trample it down. One of these grasses, the Bhoorut (*Achyranthes aspera*), yielded in 1869 a large quantity of seed, which only required collecting to give the people a wholesome and plentiful diet. It was as valuable in Marwar as was the manna of old to the Israelites in the wilderness. The Bhoorut has a very small grain, and is difficult to extract from its prickly husk, but it makes a nutritious and palatable bread, and sells in the bazaar at the same rate

as bajra, from which, when cooked, it can scarcely be distinguished. Large supplies of this seed have been laid in, sometimes sufficient for a year's consumption, not only by the poorer classes and by cultivators, but even by Thakoors, who have contented themselves with Bhoorut, whilst their ryots have been supplied with bajra to prevent them from emigrating. Had I space I would dilate on the relief bestowed by Thakoors and other landholders who advanced grain purchased either with their own or with borrowed money for the preservation of their ryots; and though their motives were not disinterested, saved many villages and lives. Nothing could more convincingly show the advantage of a landed aristocracy to a country than the conduct of the Marwar Thakoors during this great calamity.

15. The mortality amongst the Marwar cattle was estimated in my last year's report at 75 per cent. of the whole; but this estimate was too low. Certainly not more than 15 per cent. have been saved, and as the estimated number previous to the famine was 2,250,000, this would give a loss of nearly 2,000,000 of cattle, leaving only 375,000 remaining. The number of cattle for sale at the great fair of Tulwara in Mullanee in March 1868, just before the famine, compared with the number offered this year in March 1870, will show the diminution in the stock.

Cattle offered for sale at the Tulwara Fair in 1868 *and* 1870.

Description.	1868.	1870.
Horses	2,258	600
Camels	33,235	2,000
Bullocks	76,369	12,000 (many of these from Scinde.)
Donkeys	1,200	.....

It should be recollected that in 1868 the cattle offered for sale were unbroken cattle, the superfluous increase by breeding. In 1870 it consisted chiefly of the precious broken-in stock of families driven to sell them to purchase food. The present poverty of the people may be comprehended by the fact that, notwithstanding the great demand for cattle, only 150 horses and 2,800 bullocks found purchasers at the fair at prices 25 per cent. below the rates which the same animals would have fetched before the famine. This formerly rich country is now poverty-stricken. Its herds are gone. The vast plains where the cattle used to graze are deserted; the grass untrodden and uncut. Animal life appears to have been temporarily extinguished. A bird is rarely seen or heard. The countless herds of antelopes have disappeared; dogs, foxes, and jackals are dead. Even the field rats have been starved out, and insect life has notably diminished. The stillness of death is felt everywhere.

Tonk, 1869.—From Rajputana Administration Report for 1868-69.

This State (Tonk) would have suffered much more but for its large Mahomedan population. The consumption of kine afforded to the people another means of subsistence, and as the starving multitudes passed

through the capital in search of food for themselves and for their cattle, the latter were to be had almost for the asking. Bullocks were to my knowledge sold for a rupee each, and as far back as October beef was procurable in Tonk at 27 seers the rupee: indeed, the meat market was overstocked, for butchers could afford to buy cattle at such prices, but it was beyond their means to keep them, and they generally passed direct from the owner's hands to the slaughter-yard.

Hindus selling kine to Mussalman Butchers.

12. It speaks eloquently for the state of the times when we see and hear of the Hindoo bartering the sacred emblem of his religion to the Mahomedan, knowing the object for which the transaction takes place. His feelings of devotional superstition even succumb to the intensity of bodily suffering he has undergone, and the act conveys more to narrate reality than would the most graphic description of the sad period under review.

The Grass famine; its effects on the Meena Districts.

13. The effects of the grass famine have been lamentably disastrous in the Meena Kherar. The Assistant Agent furnishes statistical data of how this serious affliction has affected Tonk. Boondee, Kotah, and Jhallawar have derived the advantage of an extensive hilly country, and, comparatively speaking, have escaped; but the Jehazpore district here alluded to, inhabited by a people who subsist mainly on the produce of their cattle, has suffered terribly, and many a long year must elapse ere they can recover a loss the memory of which will remain with life.

14. It has been sad beyond measure to pass through their villages and see the cattle in every stage of starvation, some actually dying before one's eyes; whilst the mounds of skeleton bones at each village gave it the appearance of a charnel house rather than a human habitation.

Mortality amongst cattle.

15. Some little idea of the mortality may be gathered when I mention that from the Returns of 20 small villages in the Meywar Kherar it appears that up to the 28th ultimo had died no less than 295 bullocks, 2,408 cows, 692 buffaloes, and 775 calves, or a total of 4,170 head of cattle, which, if we estimate at an average of Rs. 10 per head, shows a loss of Rs. 41,700. There are 27 other Meena villages belonging to Jeypore and Boondee, but for which I have no Returns; the above, however, may be taken as a fair criterion of what the whole loss will amount to; and seeing that, humanly speaking, two months must elapse ere there be any relief, it may be estimated at considerably over a lakh of rupees.

Dearth of fodder for cavalry at Deolee.

16. It was for some time a matter of much anxiety how with this dearth of fodder the cavalry stationed at Deolee would be able to get on. At length the happy expedient was hit upon of allowing 50 per cent. of the men to go on furlough, which reduced our difficulties by one-half, and we shall be able to pull through comfortably. It has been

necessary, however, to get grass from long distances, and to pay exorbitant prices, but this was a secondary consideration ; the article could not be dispensed with, and the quantity was very limited : at this present time grass and grain are selling weight for weight at the same rates, and this in a grass country.

Loss of cattle and agricultural produce, &c.

Tonk, 1869.—Captain Blair.

Famine tract in Tonk State.

15. Only two pergunnahs of this State, viz., Tonk and Rampora, have fallen within the true famine circle. The other four have all more or less suffered from the scanty rainfall of the last monsoon ; but in none has there been any considerable distress.

Losses by famine.

16. It may not be uninteresting to note the losses which have been sustained in agricultural produce and in cattle in the Tonk and Rampoora Districts, for although their area forms but a fraction of the famine tract, still the statistics I am able to supply may not be obtainable elsewhere, and may therefore be of some small value as illustrative of the gravity of the calamity in Central Rajpootana generally.

Losses in agricultural produce.

Tonk and Rampora contain an area of about 640 square miles, with a population of 131,000 souls. In the year 1867-68 the total estimated out-turn of cereals amounted to 648,500 maunds, the value of which at the rates then obtaining may be set down at Rs. 12,97,000. The gross produce during the current year is estimated at 155,000 maunds, worth, according to present prices, Rs. 6,75,000. The decrease in produce then amounts to 493,500 maunds, worth, at ordinary rates, Rs. 9,87,000. Of course so large a sum has not found its way wholly out of the people's hoarded savings, but has been in a large measure met by economy in consumption. One chittack per diem on a population of 131,000 souls for ten months represents 61,250 maunds. I take it that the average reductions in consumption per head must be about 2½ chittacks per diem, or say 150,000 maunds, during the famine, representing a value of Rs. 6,00,000. A further saving in the amount of grain consumed by cattle has to be taken into account. This might be set down at Rs. 1,00,000 at least.

Losses in cattle.

18. Of cattle, only 30 per cent. will, it is calculated, be saved ; the scarcity of fodder has been unprecedented : grass sells at about the same prices as grains, *i.e.*, 10 seers for the rupee. Horned cattle have been, and are still, dying in enormous numbers. To satisfy myself that the

percentage of loss in cattle was tolerably correct, I caused an enumeration to be made, a few days ago, into 32 villages in the neighbourhood of Tonk with this result:—

Number of cattle last June		12,711
Number that have died	7,276	
Number of which there is no hope that they will survive—July ..	1,322	
		8,598
Balance ..		4,113

The villages put down 1,322 as certain to die, and expressed great doubts about being able to save more than 3,500. In the Tonk and Rampora Districts there were in last June 100,430 head of cattle: 70,292 may be estimated as the probable loss, which, at a modest computation of Rs. 10 per head, are worth Rs. 7,02,920. Adding this sum, then, which represents the value of material wealth destroyed, to the sum which represents the value of the decreased produce, we find that the famine has lost to these two small districts Rs. 16,89,920.

Influence of the famine on price of copper.

19. The influence of the famine on the price of copper coin is worthy of note. Sixty-one to sixty-two native pice now run to the imperial rupee, whereas in ordinary times the number varies from about 48 to 54 pice. This may be attributed to the circumstances that the present pressure on the bulk of the people has not only checked the purchase of copper vessels, but has thrown a large number of old utensils inot the market, lowering the price of copper very materially.

COMPARATIVE PRESSURE ON THE DIFFERENT CLASSES OF SOCIETY AT THE SAME PERIOD.

COMPARATIVE PRESSURE ON THE DIFFERENT CLASSES OF SOCIETY AT THE SAME PERIOD.

Moradabad, 1860-61—Mr. John Strachey, Collector.

No pressure of Famine on Agricultural classes.—Generally speaking, the agricultural classes have had sufficient food to afford them at least a bare subsistence. Under the name agricultural, I include those classes alone who derive their subsistence from the land which they occupy as proprietors or tenants. I therefore include among the non-agriculturists, not only the people of the towns, and the petty artizans of the villages, but the large class of laborers who support themselves by working for hire. Of the latter, a large proportion are in reality, agricultural laborers, but they are maintained by wages and not by the produce of their own fields.

Among the agricultural classes thus defined, although there has been much individual suffering there has been nothing that can properly be called famine.

Classes which have principally suffered.—The following table shows the number of persons belonging to each of the principal classes, who were present in the Moradabad poor-house on the 30th April and 31st May. It will serve to illustrate what has now been said, and I believe it represents fairly the comparative pressure upon the various sections of the community. It will be seen from this table that the numbers admitted into the poor-house, during the month of May, were very large. This was mainly the result of the cutting of the rubbee crops. No class of the community has suffered so severely as that of the *chamars*,* unless it be that of the *joolahas**. Out of a total of 5,920 persons in the poor-house on the 31st May, 3,961 belonged to these two classes.

Many of these people are village agricultural servants and artizans, but the greater part of them are non-agriculturists of the towns. The Mahomedans have suffered more severely than the Hindoos, in proportion to their numbers; and while Hindoos of good caste have required little relief, the Mahomedans, of what are considered the superior classes, have often been in great difficulty. The number of Sheiks, Syuds, and Puthans, who have been relieved, has been very large. The Mahomedans, generally, were never so well off as the Hindoos, and, since the mutinies, they have been in a still more depressed and impoverished condition.

* *Chamars*—skinners; *joolahas*—weavers.—J. G.

Table showing the distribution, according to caste, of the inmates of the Moradabad poor-house, on the 30th April and 31st May 1861.

			30th April.	31st May.
Hindoo castes ...	Brahmin	...	28	32
	Buniya	...	1	3
	Kayett	...	6	10
	Jat	...	27	44
	Tuga	...	4	1
	Thakoor	...	4	17
	Goojar	...	14	14
	Aheer	...	38	92
	Koombar	...	102	133
	Kuhar	...	42	53
	Baghwan	..	42	83
	Bhainyar	..	25	13
	Hujjam	..	22	2
	Guduriya	..	61	24
	Dhobee	..	14	8
	Lodha..	..	0	27
	Chohan	..	0	25
	Khakrob	..	0	97
	Chumar	..	1,364	2,829
	Other castes	..	0	40
	Total	..	1,794	3,547
Mahomedan classes	Sheikh	..	508	721
	Syud	..	123	132
	Mogul	..	35	33
	Puthan	..	111	133
	Telee	..	66	65
	Rungrez	..	4	8
	Fukeer	..	9	27
	Cheepee	..	8	7
	Baghwan	..	2	7
	Sukka	..	12	10
	Lohar	..	3	9
	Hujjam	..	23	18
	Joolaha	..	977	1,132
	Other castes	..	39	71
	Total	..	1,920	2,373
	Grand total	..	3,714	5,920

Famine prices not necessarily indicative of general distress.—Although the agricultural population has thus suffered comparatively little the prices of food have risen higher in Moradabad than in almost any district of these provinces. The causes of this fact are not difficult to understand. In Moradabad the non-agricultural population is large, and there is no district in the North-Western Provinces with so many considerable towns. The agricultural population lives mainly upon the food produced by its own industry, and thus the bulk of the people are not purchasers of food. In districts where the means of communication are better than they are here, the people of the cities and towns are mainly supported, in times of scarcity, by food imported from a distance. In districts where the importation of food from outside is difficult, where the home production has fallen short, and where the non-agricultural community is numerous, the prices of food in the market must necessarily rise excessively high. But the mass of the population being agricultural, food may be selling at famine prices, and there may nevertheless be no general distress. The same facts explain how it happens that comparatively small importations of food often produce in this country a very great effect upon the prices prevailing in the markets of the towns.

It is only when the stores are exhausted, which the agricultural classes have reserved for their own consumption, that a state of actual famine, in its worst form, is arrived at. We can still hope that this extremity may be escaped; but it cannot be doubted that the stock of food in store has been reduced within narrow limits, and we must look with apprehension to the future.

Scarcity of food in 1860.—The pressure upon the non-agricultural classes commenced in the spring of 1860. The rainy season of 1859 was unfavorable, and the harvest in the autumn of that year, and in the following spring, were very poor. In July 1860 wheat was selling at eleven seers per rupee, and the commoner grains were a little cheaper. So great was the scarcity of food at this time, that mango stones were ordinarily sold in the towns at the rate of 30 seers per rupee, a price as high as that of wheat in favorable seasons. Although no regular operations were at this time organized, a considerable amount of relief was given to the poor, both in the shape of charity, and in wages upon public works.

Although the autumn rains of 1860 were very insufficient, the actual quantity of food produced, during the khurreef harvest, was considerable, and although prices remained high, the distress in the district was not so great as to render necessary any extraordinary measures. It was not until the 1st February of the present year that systematic operations for the relief of the poor were commenced.

North-Western Provinces, 1860-61.—Colonel Baird Smith.

14. It is impossible, however, to be satisfied with the simple statement of the existence of these marked internal contrasts within the famine tract. To give some definite and sufficient explanation of their causes seems essential. Two features, one of physical, the other of moral origin, will be found in almost every instance to characterise the tracts in which the famine has pressed with its utmost intensity. First, nearly all these tracts are marked by high surface levels, raising them much above the average level of the sub-soil water in good tracts. This difference is sometimes due to increased height of the surface soil levels, and sometimes to depressions of the water-table levels, but the existence of a seriously increased difference in such cases is uniform. Second, the same general uniformity will be found to prevail in reference to the moral qualities of the proprietary bodies who have possession of the land, and the influence of race, and the qualities distinctive of race that seem to be as hereditary as more substantial property, will invariably be recognized as most powerful agencies in marking out the limits of the worst parts of the famine tract. I have now before me a chart showing in different colours the status of proprietary occupation in the famine tract, and in following the colours, marking the possessions of such tribes as Goojurs, certain clans of Rajpoot descent, Rangurs, some classes of Brahmins, Kyats, and the like ; these tracts are found (as from the turbulence, the indolence, or the incompetence of their possessors, it was to be expected they should be found,) in the darkest tract of the famine. Race and its influences constantly modify physical conditions, for isolated estates held by Jats, Aheers, or proprietors of other good tribes, in the very heart of a bad tract, will constantly be found in tolerable cultivation, and at least the utmost made of their poor resources that human industry could make of them. No such efforts are ever made by the tribes who have no natural genius for agriculture. They sink helplessly beneath the pressure of unfavorable physical conditions, and fulfil no single function of a proprietary class ; not even the function of tax-paying.

15. Although the two causes just specified stand out more prominently than any others, they are not the only ones that influence the demarcation of the good and bad sections of districts. The general action of the talookdaree system, so far as it has been permitted to exist in the central section of the famine tract, has been on the whole beneficial, and has tended to enlarge the limits of good tracts. Large proprietors can afford to do more than merely pay Government revenue. They can afford to help their tenants, and in most instances they have not neglected that duty. I had pleasure in making the personal acquaintance of some native gentlemen who had been remarkably unselfish in this respect, and while held to the strict terms of their covenant with Government, and allowed no remissions, did grant such remissions as they thought were required to their sub-tenants. Of course, as among

ourselves under like conditions, there were bad as well as good landlords; but on the whole, I believe, the large proprietors have acted with justice in most instances, and in some with generosity. As regards the public revenue, there cannot be a doubt of the value of the class. I never conversed with a single district officer on the prospects of his district income that he did not congratulate himself on having numerous large landholders, or lament that he had so few, as the case might be.

16. Another cause tending to intensify the sufferings in tracts possessed by turbulent tribes, has doubtless been the heavy pressure of penal fines with which most have been punished for their atrocious conduct during the disturbances of 1857 and 1858. Secunderabad, in Boolundshuhur, for example, is mainly possessed by Goojurs, a notorious race, and is one of the blackest spots in the whole of the famine tract. My attention having been specially directed to it, I visited the locality and found it quite as bad as Khyr, in Allyghur. But the pressure was increased in Secunderabad by the Goojur tribe having been fined the large sum of 45,000*l.*, of which about half had been collected, and half hung *in terrorem* over them, while their property had well nigh perished under the drought. They are not a tribe who have many claims on our sympathies, and probably the best thing that could happen for society would be that they should cease to be proprietors of lands they misuse, and take their fitter place as day laborers. But the calamity of present famine has no doubt in their case been greatly aggravated by the heavy pressure of this mulct, and as other tribes, or the same tribe in other equally bad localities, have been similarly dealt with, the influence of this cause has been considerable.

N.-W. Provinces, 1861.—Comparative Immunity of the Industrious Castes from Starvation.

FROM MR. GIRDLESTONE'S MEMOIR ON PAST FAMINES, N.-W. P.

As was natural to expect, the industrious classes have always fared best in a season of drought. Jats, Kachees, Koormees, and the like, have found the means of subsistence when others have perished. At the works in the Mohun Pass in 1861, Chumars alone, not to mention other men of low degree, were in an immense majority. The Jats of Meerut lived by agriculture in 1826, when men of higher caste were fain to satisfy their hunger with roots and berries. No district suffered worse than Cawnpore in 1837-38, and in those pergunnahs where the misery was greatest more than half the cultivators were Brahmins or Rajpoots. In pergunnahs Dadree and Duncour, of Zillah Boolundshuhur, which were most awfully devastated both in 1838 and 1861, Goojurs* formed the bulk of the population. The mode of life of this tribe is notoriously inconsistent with the idea of steady, earnest toil.

* Goojurs, more than any other class of natives, perhaps, will not accept improvements unless they are thrust upon them. Canal water is what their wretched, barren villages want, and so far the boon has been denied to them, for the principle hitherto pursued has been to construct canals through fertile tracts, in order to make them profitable.

Neither they nor the high-caste Brahmin* or Rajpoot have ever known what it was to put their shoulder to the wheel, and even want cannot teach them to throw off their indolent habits or their foolish pride. The Rajpoot will stay at home sooner than go forth to beg, or undertake work which he considers derogatory; and it cannot be doubted that this feeling of caste has in time of scarcity caused many to perish by a lingering death in the privacy of their own houses. In case of a future emergency, one of the most difficult problems for Government to solve will be how to deal with such men as these. It may be a hard matter, but surely not an impossible one, to devise some congenial sort of occupation by which these haughty indigents may win their bread. It is foolish to despise their prejudices altogether, but yet some way must be found of reconciling their support with the principle which demands labour in return for food.

Behar, 1866.—Mr. Cockerell.

Rise in wages throughout Behar before 1866 *not commensurate with the rise in prices.*

133. Whilst the price of food rose to three times its former average, the wages of labor underwent little or no change, and hence the want of the means of support pressed more severely on the laboring classes. Throughout the districts lying to the north of the Ganges and east of the Koosy rivers, the wages of day labor have undergone little or no change during the last ten years, the rates paid to adults ranging between three rupees and two rupees per month. Exceptional rates were paid during the height of the scarcity, and consequent prevalence of high prices of food, from June to September 1866, or in most cases food was given in addition to daily wages for such special work as the manufacture of indigo; but the general and rapid increase in the price of all articles of food which has taken place during the last three years has been accompanied by no tendency to bring about any general and permanent increase of the price of labor in those districts. To the south of the Ganges and in the vicinity of the Railway, the value of labor is said to have increased about 20 per cent. during the last five years.

Laboring classes of Behar declared by medical officers to have been generally under-fed so early as 1860.

134. Even when the supply of food at the prevailing prices previous to the years of drought was abundant, the condition of the laboring classes in the northern districts, and specially in Tirhoot and Chumparun, was only just above the level of want. I find that in 1860, when the market rates of rice and other grain were comparatively very low, testimony to the generally weak condition of the laboring population of the northern districts was borne by the medical officers in their reports on the dietary of the prisoners in the goals of those districts, when modifications in the scale then in operation were under discussion. If

* There is one notable exception. I believe that, in some parts of Cawnpore, Brahmins will put their hands to the plough with a will. This shows that there is not a universal prejudice on the part of the caste against labor. In the Kangra Valley, too, high-caste men are ready to perform some of the manipulations connected with the manufacture of tea.

the rates of payment of labor were insufficient even in comparatively prosperous times to maintain a sufficiency of bodily strength and vigour in these classes, the degree of want and privation to which they must be subjected under the condition of the price of food rising to double, and even treble, its former rate, with no increase in the wages of labor, may readily be imagined.

Degrees of pressure on the several classes of society.

135. The more **substantial agriculturists** suffered no personal privation. Where the failure of their crops was only partial, they were probably better off than in ordinary times as though their grain might be less in quantity to the extent of one-third, or even one-half, of the usual average outturn, there was a clear gain on so much of it as could be brought into the market, price being more than doubled. The ryot ordinarily divides the produce of his fields so as to keep a sufficient quantity for the food of himself, his family, his laborers, and dependents, and their families up to the period of the following harvest, and applies the proceeds of the residue to the payment of rent, purchase of stock, and his general expenses. The diminished quantity of produce, therefore, necessitated such a modification of his usual arrangements, as would admit of his bringing sufficient grain into the market to profit by the high prices, and compensate himself for the deficiency of his crop. This resulted in the ryot dispensing with his ordinary **hired labor**, for which he would have to pay, not in money, but in grain, and so the **mere laborer**, dependent on the cultivator, was deprived of his customary means of support. Similarly, the petty village **artizans and day laborers**, the dosadhs, mosaheers, domes, koormies, and others, who in a village community ordinarily receive a day's food, supplemented by some small cash payment, for a day's work, could no longer obtain this employment when the day's food had assumed a value hitherto unknown, and every householder's store of grain was so reduced that he with difficulty supported his own family.

136. The professional **beggars, the crippled, and infirm**—the mass of pauperism in fact, that in ordinary times subsists upon the **charity** of the village community, and is by it cheerfully and ungrudgingly supported, could no longer appeal successfully to the compassion of the villagers, for the handfuls of grain, which in ordinary times were held of little account by the donors, were not given when the gift involved an appreciable personal sacrifice. The **less substantial class of ryots**, whose land tenures were too inconsiderable to produce by their cultivation a sufficiency for the maintenance of themselves and families, unless supplemented by the earnings of labor, and specially so in the exceptional cases where the failure of the crops was complete, also suffered more or less privation.

Behar, 1866.—From Mr. Cockerell's Report.

Tirhoot.—12. The period between the harvest of the spring crops and the season for sowing the autumn and winter crops, *i.e.*, from April to June, affords little demand for agricultural labour, and in ordinary years the laborers subsist during this period on the stores accumulated by them, as their labour is paid for invariably in kind, during the previous harvest; but in the year of scarcity the employers of this description of

labor were unable, from their diminished stocks of grain, to find the means of meeting the cost of labor to the usual extent, and the laborers having no stores to fall back upon, and being either unable to obtain, or unwilling to seek, other employment, were reduced to extreme destitution.

13. The professional beggars and the crippled and deformed paupers, who ordinarily subsist upon the charity of the agricultural village communities, suffered severely, and to a certain extent also the petty village artizans, who earn their livelihood by working for the ryots; but perhaps the greatest destitution and loss of life was amongst the "Nooniah" or saltpetre manufacturing class. This class formerly gained their livelihood by preparing the saltpetre in its crude state and supplying it to the refiners; but of late years, owing to the imposition of a considerable export duty, and the successful competition of the substitute for saltpetre which is now manufactured in Europe, the trade has gradually declined, and, at the present prices obtainable, the Nooniahs can no longer make a living out of it. The vast majority of this class has thus been thrown on the general labor market, and, as during the season of high prices the demand for labour was slack, they had no means of subsistence.

Chumparun.—43. The mortality in this district from actual starvation and disease, engendered by want of proper sustenance, was excessive. The return furnished by the District Superintendent of Police has been prepared partly from police reports, and partly from the results of inquiries amongst the landholders. Though the data upon which it is based cannot establish any claim to accuracy, the number of deaths has probably not been exaggerated, and if not, it shows that out of a population of about 850,000, not less than 56,000, or 6 per cent., have perished, either directly or indirectly, from the effects of the famine.

44. The classes upon which the scarcity and high prices of food pressed most severely in this district were the Dosadhs, Ahers, Domes, Koormies, and Nooniahs, especially the last, of whom it is stated that not less than one-third died during the famine. They formerly gained their livelihood entirely by supplying crude saltpetre to the manufacturers, who refine and prepare it for the market; the present market price does not allow any profit to the refiner, and hence there is no longer a sufficient demand for the crude saltpetre, to find regular employment for the Nooniah class in its preparation.

Hooghly, 1866,—Orissa Enquiry Commissioners, Vol, I, pages 327, 328.

Sufferings of laborers.

18. At a later period the class of laborers who subsist on wages suffered. The result of the high prices of necessaries was naturally to diminish the demand, and to reduce the wages of agricultural labor to a point at which they did not suffice for subsistence of the laborer himself, much less of his family. But the crowds who thronged round the relief-houses of the Jehanabad sub-division consisted principally of cloth weavers and their families. In November 1865 the

Weavers.

Rapid decay of their trade.

Collector of Hooghly reported that the weavers of the Jehanabad sub-division had turned out cloth, valued at Rs. 7,65,000 in 1864-65, but that the estimated outturn of 1865-66 was Rs. 6,25,812 only. On the other hand the demand for English piece-goods was stated to be rapidly increasing, the estimate of 1865-66 being 57,371 pieces, against a consumption of 48,648 pieces in 1864-65. Since then the English had continued to drive out of the market the local manufacture; the weavers could not compete with the English machinery; and their earnings were reduced to a minimum. The sudden rise in the price of necessaries hastened the crisis, and the profits of their trade became altogether insufficient for their support; they shut up their looms, and wandered about the country with their families in search of food.

They flock into Calcutta.

19. When the native gentlemen of Calcutta began their distributions of food, numbers of these Jehanabad weavers were found who have been attracted to the city by the intelligence. The Magistrate of Hooghly estimated the number of those who had emigrated to Calcutta at 5,000 or 6,000.

Pauper weavers encouraged and assisted to return to their homes.

23. The Board and the Calcutta Relief Committee at once resolved to encourage these persons, as well as others from outlying districts, to leave Calcutta and to return to their homes. It was arranged that the Calcutta Committee should send the immigrants from Jehanabad by boat to Ghatal, where they would be received by the Deputy Magistrate of Jehanabad and sent on to their homes in the interior of the sub-division. These arrangements were made known to his tenantry by Baboo Joykissen Mookerjee, in whose estates most of the weaver villages lie.

Arrangements for receipt of returning pauper weavers.

24. Temporary sheds were erected at Ghatal for the reception of the paupers from Calcutta. The able-bodied were to be sent off at once from Ghatal to the works which had been provided for them on the old Benares road; the weak were to be fed up until they were fit to be passed on to their own homes, whence they would be made over to the charge of the local Relief Committee. It was, however, subsequently explained that no weak or sickly men would be sent.

Pauper weavers' return to Ghatal.

25. On the 24th of August the Collector reported his arrangements for the receipt of paupers at Ghatal to be complete, and on the 3rd of September the Deputy Magistrate received the first consignment at Ghatal. From this date the paupers were sent off in batches from Calcutta, Ghatal, and other places as they could be induced to go, for they were at first very unwilling to leave the good things which were supplied to them in Calcutta. On being despatched each pauper received from the Calcutta Committee sustenance for the journey one rupee, and a brass water vessel and plate.

26. In course of transit from Calcutta to Ghatal many of the paupers disappeared; probably they looked back with longing to the compartively comfortable fare which they had left behind them, and could not resist the desire to return; others disappeared after they had

been housed at Ghatal; some even left behind the new drinking pots and plates which had been supplied to them in Calcutta.

Orissa, 1866.—Enquiry Commissioners, Part I.

48. As usually happens under our system, there has been from the first a large transfer by sale of zemindaree rights, and the purchasers have been almost universally monied men of the older-settled and richer province of Bengal, with whom the purchase of landed rights is the favorite form of investment. The result is that the zemindars are now divided into two classes, the old Ooryah zemindars and Bengalee purchasers, the latter being almost always absentees. A very unfavorable opinion respecting both classes has been freely expressed throughout our enquiry. But the truth seems to be that they are not much worse than the circumstances of the province might have led us to expect in India, where agricultural development and the investment of capital in improving the soil have never been generally recognised as a function of the superior landholder. The old zemindars, as being residents, are described as on the whole the better class of the two. They are generally neither rich nor provident and they never think of improving the land, but many of them have been in the habit of storing grain, and have to some extent performed the function of the much abused but very necessary bunneah of other parts of India (so wanting, it has been said, in Orissa) by advancing grain to the ryots, though on exorbitant interest, at the time when they are most in want of it. They seem frequently to have as kindly a feeling towards the ryots as is consistent with making as much as possible out of them. The absentee proprietors, on the other hand, though probably personally a much superior and generally an educated class, have as little idea of practical improvement of the soil, look only to make the most of the rents as the return for their money, and do not perform to the same extent either the function of grain lenders or that of patriarchal landholders. Yet the Bengalees in their own country do not seem to be generally very oppressive landlords; they are generally content to let things be regulated by custom.

49. It should here be noticed that the Government manufacture of salt had long been carried on upon the coasts of Orissa, and gave employment to a large number of people. It was found, however, not to be really profitable—the cost of the salt was greater than of that made on the Madras-coast, and imported salt was driving it out of the market. Finally, the Government manufacture was wholly discontinued in the early part of 1863. There only remained considerable stores of the salt previously manufactured, of which it was proposed gradually to get rid. The Molunghees, or salt manufacturers, do not seem to have depended quite exclusively on their salt earnings. Like most people in India, not inhabitants of towns, they were also more or less agricultural, but their holdings had not been sufficient to support them; the wages of their labor was their main reliance. Still the rise in the value of grain, and consequent agricultural prosperity, seem to have led to their absorption in the general community so long as the seasons were favorable, and they had apparently merged in the mass without very serious complaint. The effect however, was, in the parts of the country in which they resided, to increase the class of agricultural laborers whom any derangement would throw out of employ and out of food.

50. The class seems to have been somewhat large in Orissa generally. Some went to a distance to seek employment on great works and in Calcutta, and they everywhere did the ordinary work of coolie laborers, but they may be principally described as agricultural laborers. Many of them had small patches of land, but not enough for their subsistence, and they chiefly depended on working for others. As upon this class the utmost severity of the calamity has fallen, it may be well to mention (with reference to much of the evidence regarding the modes of relief) that they are generally of the lowest castes who would be least affected by caste prejudices.

77. Still more remarkably than in the North-Western Provinces (as noticed in such striking terms by Colonel Smith) was the advantage possessed by all the classes having any sort of rights in the land. In this instance not only they had better means and better credit than the laboring classes, but being to a considerable extent in the habit of keeping grain for home consumption, those who had crops of some kind were better provided than the non-agricultural classes, when grain was not to be bought.

Cuttack, 1866.—Baboo Rungo Lall Banerjee, Deputy Collector, cited in Mr. Macpherson's (Collector) report of 1867 on the mortality enquiries.

Pergunnahs Kodinda, Bakrabad, Cuttack Havelle, Kurrimol, Suddumpore, Tuppunkhund, Kokowakhund, Soongra, Sovong, Sursottee Matkutnugger, Koosmundul Kerwalkhund, Kuncheskhund, Kil. Daljora.—The enquiry (1867) in these pergunnahs was conducted by Baboo Rungo Lall Banerjee, Deputy Collector, whose report regarding the mortality, inundations, and assistance rendered by zemindars is as follows:—

Mortality.—The mortality by starvation and disease induced by famine, as well as the number of people emigrated, show a decrease of about 17 per cent. in my circle, as the following figures will prove, viz:—

Population in 1865	236,757
„ in 1866	195,516
Decrease ...	41,241

This decrease of population from the three causes is explained below:—

Deaths by starvation	26,615 or 11½	per cent.
„ by disease induced by the famine	8,760 or 3½	„
Gross deaths ...	33,375 or 15	„
Number of people emigrated	5,866 or 2½	„
Gross decrease ...	*41,241 or 17½	„

* *Sic.* in original.

These 15 pergunnahs are situated within a range of 1 to 24 miles from the post office in the city of Cuttack, and this will account for the smallness of the percentages of death and emigration than elsewhere, as most of these pergunnahs did not suffer so much by the drought and inundation as more distant parts of the district. My enquiries go far to establish the fact that it was the laboring and artizan classes that died in greater numbers by starvation than many other class of people though the following figures may lead to the conclusion that apparently, the mortality was only equal among the agriculturists and the laborers. Yet when it is known that ten-sixteenth of the agriculturists are *Pahi* ryots, who also depend partly on the proceeds of the wages or hired labor, the deaths among the laboring classes will prove to preponderate over every other section of the community.

Number of deaths, agriculturists, including the Pahi laboring classes	10,262 or 4½ per cent.
Number of deaths among the *bonâ fide* laboring classes	11,262 or 4¾ „
Number of deaths among the artizan classes ..	13,681 or 5¾ „

The *bonâ fide* laboring classes, if I am allowed to use the expression, consist of Pans, Kondras, Bhois, Boisrrees, Sowars, &c.; from these castes only that hundreds and hundreds of men were compelled by dire starvation to steal horned cattle and feast on meat prohibited by the *Shastras*, a fact only to be reconciled when it is told that these people are apparently the descendants of *Hinduised* aborigines of the neighbouring hills; they are generally known as *Mooliahs* or *laborers*, but in fact they are the real cultivators of the soil. A class of Brahmins, known as the *Sasun* Brahmins, whose livelihood depends solely on agriculture, these, with the *Khooshas* or respectable portion of the village community, employ the *Mooliahs* in the cultivation of their *Nij chas land*. A Mooliah will never go to work in the Public Works Department for the scanty wages of 3 annas a day if he finds employment in the cultivation of his own village lands, because the terms are more indulgent in the latter than in the former; for instance, he gets 8 *ghoonts* of land to cultivate on his own account for which he pays no rent, and 2 *seers* of paddy per diem for food, besides 1 *hulla* equal to 5 seers of paddy for every 10 *hullas* at the harvest season for cutting, thrashings, &c.; small sums of money are also lent to him by his employers, for which no interest is charged; his wife and children also receive some allowance of corn during harvest and a piece of apparel in the *Huli* or *Dussera* festivals. The drought of last year completely deprived the poor *Mooliahs* of their honest avocation, and hence the great mortality among this class of people.

As a reason why the proportion of deaths among the artizan class is greater in my circle than elsewhere, is to be traced to the fact that most of the pergunnahs being in the proximity of the city, the number of this class of people is more considerable than in more distant tracts of the district, as manual and skilled labor finds a more ready market in the former owing to the more artificial mode of living among the inhabitants of the city and its environs. In the following villages of Soongra

* *Pahi*, literally non-resident and so non-privileged cultivator, as opposed to Thani *(sthani)*, resident or privileged.

Surosuttee and the neighbouring pergunnahs of Painda, the weavers died by hundreds.

Kathar.	Buhlepudda.	Huripore.
Tentole.	Rahang.	Radhanuggur.
Sathatta.	Bulpore.	Monhurpore.
Mullapeeda.	Gudyepore.	Rajnuggur.
Peeschimkutch.	Kishennuggur.	

The fact is noteworthy why the mortality raged so fearfully among these two classes of people at the height of the famine when relief measures were comparatively abundant in the city and its neighbourhood. My enquiries confirm the report that very few people of the neighbourhood, where there was a centre of relief, did resort to it for succour, caste prejudice being very strong among the Ooriahs; even dire starvation will not compel them to go to the *chutter* to partake of cooked food there. *Kangalees* came in numbers to my tent for a handful of rice, but would not go to the *chutter* for a full meal of cooked rice and dall. I took a note at the Tanghee *Unnochutter* to ascertain the number of *kangalees* of the neighbourhood receiving relief in this centre, and the following result of my enquiries will prove that a very few paupers of this tract repair to the *chutter* for relief:—

Names of Pergunnahs whence the paupers came.	Number of paupers in the *chutter*.
Kerwalkhund	5
Durpun	11
Kunchibund	12
Daljora	35
Kokohund	107
From distant pergunnahs and other districts	405
Total ...	575

The above memorandum shows that an Ooriah pauper resorts to a *chutter* situated far from his home, perhaps to avoid the disgrace which the stigmatic name of an outcast entails. It was this which led thousands and thousands to die on our highways, as those frail, famished, emaciated skeletons were quite unable to repair to a distant *Unnochutter* by journeying a distance of some 50 or 60 miles from their abandoned houses. If our *chutters* will be maintained this year also, I would strongly recommend the distribution of raw rice and dall, a bundle of fuel, and a little salt and oil, and the constant supervision of the *chutters* by special Deputy Collectors, besides the visits of the manager of the relief operations.

Cuttack, 1866.—Baboo Chunder Sikar Banerjee, Deputy Collector, cited by Mr. Macpherson (Collector) in the report on the mortality enquiries of 1867.

6. *Olas.*—The fields of this pergunnah are superior to those on the south of the Brahminy River. The ordinary years they produce paddy —Beallee and Rubbee in abundance—a portion of which, specially of the first-mentioned crop, passes to the southern pergunnahs. During

the season of drought, 8-anna portion of the crops of this pergunnah failed; what was reaped would have sufficed, however, for consumption could the ryots keep it in their own stores. But it appears that the *mahajuns* and zemindars realized their dues as soon as the harvest of the 1272-73 (1865) was gathered; they stopped their loan, however, when the price of rice rose high, and commenced to sell paddy at exorbitant rates, which obtained them both ready and high profit. The difficulty was thus felt among the tenantry, who had to pay a high price in cash, for, what in ordinary times, they got on credit only. The generality of the cultivators of this pergunnah, however, are well-to-do men, and distress did not press bad upon them. It was confined to the day laborers and artizans, and a large number of weavers, who were affected more by the high price of rice than the failure of stores in the vicinity.

7. *Shergurrah.*—Paddy is the only crop raised in this extensive pergunnah, and on its excess produce, the people of a large portion of the district depend for their consumption throughout the year. The distress in many of the places immediately to the south of the Brahminy River may be partly traced to the failure of the Shergurrah paddy in 1865, when only half the outturn of ordinary years was reaped. The remarks made regarding Pergunnah Olas apply to Shergurrah also; almost its entire population are agriculturists, of which a third portion may be said to have felt no distress. The rest whose stores do not ordinarily suffice for the year had to look to the *mahajuns* for assistance. The conduct of these men appears altogether to have been prudent. They generally lent paddy on this condition that every Rupee's worth of rice advanced in July last was to be returned at one Rupee's worth rice in January next. This was as much as charging interest at 4 to 500 per cent., and to fulfil the condition, a large portion of the last harvest which would have otherwise found its way to the market has gone to fill the store of the *mahajuns*. Hence, perhaps, the high price of rice now prevailing in localities where the crops have been abundant. Nevertheless at the time the above contract had its advantage, inasmuch as, under it, the supply of rice never fell short of the demand, a large portion of the people thus escaped starvation, and the distress appears to have been confined to the poor whose demands of loan on the *mahajun* could not safely be granted.

Pooree, 1866.—From Mr. Collector Raban's Report after the detailed enquiries in 1867.

18. The classification of the people into cultivators, laborers, and artizans does not at all accurately represent the incidence of the famine on particular classes, and is further less valuable because no census was made of the total number of each class before and after the famine. So many people in India, who do not live entirely by farming, till a little land that the title "cultivators" conveys very little idea of the circumstances of the people included under it. The number of cultivators, in this general sense, includes the bulk of the *rural* population, and undoubtedly a large number of small farmers did perish last year. Their crops failed totally in 1865, and they had no reserve of grain in store. After selling what little they had, and in some cases after sowing the land, many of them succumbed. The children and infirm of this class first died, while later in the year mortality was very general among them.

19. But the chief ravages of the famine were among, what should properly be called, the laboring population. Many of them held a little land, but not sufficient to support their families without labor of other kinds. These people have never any considerable store of food, but, excepting during the few months immediately after harvest, they live on their daily earnings paid either in money or grain. This resource of course failed last year, [1866] and the laboring classes were the earliest and most numerous victims of the famine. The bulk of these people were of the Bouri caste, and in most villages along the coast the cluster of Bouries' huts is now in ruins and almost entirely desolate.

20. The poorer class of artizans, such as fishermen, weavers, carpenters, suffered severely. They, too, were dependent on their daily earnings, and at a time when people could not purchase sufficient food, there was no demand for the services of these people.

Ganjam, 1866.—Minute by Lord Napier, dated Octacamund, 1st September 1866.

In conformity with the practice of my predecessors, I think it right to communicate to the Council the impressions which I have received on my recent tour in the portions of the Ganjam District, which are affected by famine. I am sensible, however, that I have little information to impart, which is not already known from the reports of the local officers. My visit to the district was prompted by the desire to show sympathy and encouragement to those who were laboring or suffering, and to stimulate the application of remedial measures which were already commenced or contemplated.

2. The Council is aware that the famine is confined in Ganjam to a limited and tolerably defined area. It is most severely felt in the coast region extending from Berhampore northwards to the southern end of the Chilka Lake; then along the winding shores of the lake to where it is struck by the frontier of Cuttack; from the lake westwards over a dry, hilly, diversified country, to the basin of the Ganjam River; throughout that valley with varying intensity wherever permanant channel irrigation is not applied to the land; and again with extreme severity in the parts around Suradah, between the river and the Khond Hills. The area thus affected may contain about 250,000 inhabitants, but the portion in which the scarcity has risen to the pitch of starvation does not embrace more than 120,000. By far the greater share of the afflicted country belongs to zemindary estates, in which the revenue relations of the Government and the people are not direct. Some of these estates happen fortunately to be in charge of the Court of Wards; some belong to native proprietors, not deficient in intelligence and liberality; others, again, are in the hands of families ruined or ill-disposed, and in these the burden of relief has fallen altogether on the Government.

3. The population may be divided into four categories:—(1) The ryots. (2) The coolies, or people without land, engaged in rural labor. (3) The mendicant, vagrant, outcast or criminal class. (4) The small traders and mechanics in the towns.

4. Of these classes the ryots are the most meritorious and the most to be pitied. They have suffered with great resignation and self-

respect. The decency of their caste prevents them from appearing at the relief houses as sharers of promiscuous charity. The necessities of agricultural labor bind them to their holdings and homes, where it is difficult to search them out. There can be no doubt of the extremities of distress which they have endured and still endure. Some of the Ooryah cottages I have myself visited, where destitution and starvation might be seen in every apathetic and terrible form. The same story was told by the multitudes of persons gathering a precarious and unwholesome sustenance from half edible roots, berries, and leaves, of which Mr. Forbes, the Collector, possesses a variety of specimens. The miserable condition of whole villages was attested by the emaciated appearance of their leading inhabitants, sent in numerous deputations to solicit help from the Collector at Chetterpore. The roads were full of wretched creatures prostrated on the earth. In many places I was pursued by clamorous crowds which might be likened to flocks of skeletons or ghosts. To an unpractised European eye, the distinction between the ryot in his ordinary garb or ordinary nakedness, and the landless laborer, is scarcely perceptible; but there is no doubt that the substantial ryot, especially on Government lands, feels his social elevation as much as the farmer in England. It was pitiable to see the reduction and ruin of an industrious order of men, invested in primitive forms with all the duties and obligations of property, and to reflect that nothing less than a succession of prosperous seasons, combined with considerate usage on the part of the Revenue Department, can restore these people to physical vigour and material welfare. While the peasant farmer starves, his cattle thrive. Repeated showers had fallen in the country, and the forage was abundant. The Hindoo peasant will perish by hunger beside a fat bullock. The prescriptions of superstition, which appear cruel to the individual, are conservative for the community; and the preservation of the laboring cattle secures the power of cultivation, and the sources of future life and wealth. It may sound harsh and sad to say so, but in India it is more easy to replace a man than an ox. The chastisements of nature are rarely universal. There will still be some feature of consolation and promise. In the condition of the live-stock I saw the "attenuating circumstance" of the Ganjam famine. It was reported that the pastoral ryots, who would under no pressure kill their cows, drink the blood of their living goats, and reserve the animals for successive depletions.

5. The impoverishment of the ryots, and the general absorption of money for the mere purchase of food, had naturally arrested every kind of labor demand; and the cooly class, who have no savings and no credit, must have suffered, in the first instance, even more than the ryots. The scarcity would touch them sooner and more sharply. The cooly has, however, fewer ties, fewer scruples, and a greater habit of migration. He can resort, without degradation, to the almshouse, and can travel further in quest of employment. Government food and Government wages will henceforward be sufficiently operative to save persons habituated to unskilled rural labor from the worst degrees of suffering, and from death. The recipients of public charity in the cooly class will diminish, but those from the ryot class will increase in number, between the present time and next harvest.

6. Mixed with the settled and industrious population of the Indian village, whose morals are not worse than those of any other people, and whose habits and actions are governed by inflexible social and religious laws, there exist vile and criminal castes or miscellaneous outcastes, objects of propitiation, aversion and fear to the other inhabitants. A numerous tribe of this sort reside in Ganjam, called Dundassis, who are both hereditary thieves and hereditary detectives, levying, in either quality, contributions from the villagers. They do some menial services; they practice some casual industry in the jungles; they live on carrion; and do not scruple to eat the flesh of the sacred animal; in fact they are apt to steal and kill him. The whole of these people seemed to fasten upon the relief-houses, in part, no doubt, from destitution, but in part from their habits of idleness and mendicancy. They appeared in general the least emaciated of the miserable assemblage, offering a vexatious contrast to the laboring classes who sat beside them, and to the ryots who stood afar off. I need scarcely add that the aged, infirm, deformed and helpless persons, who live in ordinary times by begging from door to door, the poorer parasites of the poor, had all resource, under present circumstances, to the charity of the State.

7. It is obvious that the same causes which suspend the employment of labor in the country must also affect the welfare of those who live by small trades and manufactures. In this climate the necessaries of life may almost be restricted to fire and food, and the purchase of its simple comforts and ornaments can easily be deferred or abandoned. The dearth and dearness of provisions would alone account for the depression of industry in the towns, but this local and transitory cause is no doubt aided by other general influences of a more permanent character. The hand-looms of Chicacole and Berhampore were, for the most part, idle, and the weavers subjected to unusual privations. The dearness of the raw material and competition from abroad are, however, powerful adversaries to native domestic fabrication, and this interest has been for years past in a languishing condition.

GANJAM, 1866.—MR. GORDON FORBES'S REPORT, PAGE 268, PARLIAMENTARY BLUEBOOK ON THE MADRAS FAMINE.

Another evil connected with this famine is the increase in pauperism* which, it is feared, will long survive the present year. These paupers, for the most part, are from Orissa, but there are also included amongst them many of the people of the district. The former, it is to be hoped, will return to their country, and seek charity there; but the latter will probably long haunt the local bazars, and be tardy in betaking themselves to labor.

There are several things which have tended in a greater or less degree to alleviate the sufferings of the people, independent of the measures taken by Government. First among these will come the absence of any extensive loss of cattle. Even in the worst months, when very many tanks and wells failed, there was always sufficient pasture to save the cattle alive. The large herds of kine, which are to be seen in every part

[* Some relief measures had to be renewed in 1872.—J. G.]

of the country, were the means of maintaining many of the very young children, who often appeared strong and healthy when the elder children and parents were fast perishing from want. None but the very lowest castes ever violated the sacred character of the ox by killing him, consequently even the poorest villages have their cattle left intact. The immunity enjoyed by the oxen was extended in great measure to goats and sheep.

The large traffic in grain to Cuttack and Pooree afforded employment to many of the ryots, who were fortunate enough to possess bandies. There are few regular carriers; the carriage therefore is performed chiefly by village bandies. The ryots, however, of those villages lying near the main line of traffic, principally profited by this trade, and their appearance contrasted favourably with that of the outlying villages. The earnings of these bandymen were considerable, as the demand was great. The daily hire for a bandy averaged from 8 to 12 annas. As many as 300 bandies have been ferried over the Ganjam river in a day. It may, therefore, be easily imagined to how many houses relief was brought by this means. The Chilka boatmen were also kept above the reach of want through this trade.

The sustenance afforded by the leaves and roots of wild plants and shrubs must not be despised. During the worst months women and children were to be seen scattered over the whole country diligently gathering leaves, especially those of a plant called balusu, proverbial for its strengthening qualities. Its leaf somewhat resembles the leaf of the box tree. The figs of the banyan were also used as food. Women and children, whose ornaments betokened them to belong to respectable families, might be seen engaged in this work.

Central Provinces, 1868-69.—Mr. Morris' Administration Report for 1868-69, page IX.

Thus while proprietors who had means of irrigation, or who were fortunate in securing more than their share of the rain-fall, reaped almost an ordinary crop, for which they could command quite extraordinary prices, others lost their crops altogether, and very many of the sufferers were not in a position to bear up against heavy loss. The country has every requisite for prosperity, but it is still, comparatively speaking, newly settled, and the landed classes have not yet attained the strong position of their fellows in more established portions of the province. Then the ties of landlord to tenant and of tenant to soil are still weak. The former have often not the means to provide for the support of their dependents through difficult times, and land is still so plentiful, that if it were possible to secure a tenant-right agreement, which prevented cultivators from wandering and attached them to the soil at a fair rent, it would be eagerly welcomed by the landlord class. Thus there is a want of cohesion and solidity in the social structure, which weakens the power of the people for resistance to the pressure of general distress, even were not local circumstances against them. But the very abundance of Chuteesgurh in ordinary seasons intensifies suffering in years of failure. The surplus produce is ordinarily so large, and the cost of export so prohibitive, that food is almost a drug, and wages are correspondingly low. When therefore a time of emergency comes, and

prices rise to the level prevailing in the surrounding country, the whole conditions of life are changed so suddenly to the classes supported by money earnings, of a more or less fixed character, that the struggle seems almost impossible to them, and, as afterwards proved to be the case, they hardly make an attempt to bear up against their difficulties. Fortunately, the day-laboring class, whether paid in money or in grain, is scanty in Chutteesgurh, where every man who has a pair of bullocks or credit takes a plot of land to cultivate on his own account, or the amount of suffering would have been out of all proportion to the machinery for relief.

Rajputana, 1869.—Colonel Brooke.

(REPORT ON THE RAJPUTANA FAMINE.)

Difference of conduct between British and Foreign subjects.

216. The difference in the behaviour of the population of neighbouring territories was very marked and suggestive, and appears to have arisen from the difference of treatment which the lower orders receive. In the Native States, the cultivators, who bring revenue into the coffers of the proprietors, are treated with marked consideration. They give generally a moderate share of the actual produce of the land in kind to the proprietor, and are enabled to accumulate a small capital; and thus a feeling of independence is engendered amongst them, so that when occasionally not treated considerately, they abandon their own and till the lands of a neighbouring village, the owner of which throws his ægis of protection over them. Such men will only live by the soil, and do not understand our demand for labor when they seek relief. They consider that accepting work lowers them in the social scale. The lowest orders in Native States, who are daily laborers merely, who bring little return in direct revenue to the proprietors, are trampled on and are continually forced to labor without wages; and, beyond the number who are actually necessary to the comfort of the proprietors, gradually leave the country where they are so badly treated. In British territory, on the other hand, where the revenue is paid in coin, and realized, if it is at all possible to do so, the cultivators become indebted to the bunyas, and by degrees loose their feelings of independence. The lowest classes of natives again are well treated, and those of the Native States flock to British towns and villages, which gain in population and wealth by the influx. These classes gradually raise themselves in the social scale, till they become as well off and as important as the cultivators, and gain a feeling of independence, whilst their employments still necessitate their working for their daily bread. In case of a calamity like the famine therefore, both classes in British territory, being thrown much together, are willing to accept labor as a means of subsistence. In no other way in my opinion can the difference in conduct by the same castes in neighbouring territories be accounted for.

N.-W. P., 1868-69.—FROM MR. HENVEY'S MEMOIR.

The agriculturists suffered little.

It has been previously stated that with few exceptions the agriculturists suffered comparatively little in the scarcity of 1868-69. Of course, there was considerable loss of farming stock, and in some

instances—as for example in the district of Lullutpore—the famine has been followed by a decline in agricultural prosperity. But, wherever irrigation extended and crops were saved, the farmer gained by the high value of his produce. And further, what was most needed was employment. If a laborer had money he could buy food, but a great number could not get money. Either they were field-laborers* or village artizans who could find no employment, or they were members of petty trades, which already declining before the competition of foreign manufactures, were destroyed by the depressed condition of the markets.

Employment the great want.

On this point testimony is unanimous. In Jhansie, those of the poor who were not foreigners were mostly weavers; in Humeerpore, they were artizans and laborers; in Moradabad, *Julahas, Chheepees,* and *Chumars;* in Budaon, artizans and field-hands thrown out of employment; while in the large cities—such as Benares and Bareilly—applicants for relief seem to have come from the lower urban population, large numbers of whom at the best of times are in chronic poverty. A careful classification of the destitute does not appear to have been generally made. In the Bijnour district, however, Mr. James White took a census of about 5,000 work-people on the 2nd September 1869, and found the distribution thus:—

Classes in several districts.

BIJNOUR: Result of census on relief works.

Chamars	2,030	Lodhas	8
Hindu Jullahas	297	Rawa	34
Mussulman ditto	572	Pathans	25
Gureriya	248	Sayyad	88
Shaikh Zada	253	Bunya	1
Sanis	184	Badi	15
Dhinwars	138	Khatta	2
Telis	150	Rajput	4
Nais	56	Rangrez	1
Khumra	20	Kussab	22
Manipore	14	Nakkarchi	19
Dhobis	88	Branjara	12
Bhangis	63	Jats	33
Bhats	18	Sakka	22
Darzis	6	Cheepee	22
Fakirs	82	Barhai	7
Joogee ditto	33	Brahmin	28
Mirdah	3	Kahars	2
Kumhar	73	Dhaniya	31
Jhojhas	5		

The most noticeable feature in this table, as Mr. White observes, is the great preponderance of *Chumars,* nearly all of whom are believed to have been field-hands, ploughmen, and day-laborers. On the other hand, the few *Jats, Rawas,* and other agricultural castes show that the actual holders of land managed to subsist without aid.

Conclusion drawn therefrom.

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* The discharge of laborers by farmers was one of the causes that aggravated distress in the great Irish famine. Farmers were described as executing all their work by the aid of their own families, or by mutual assistance rendered to one another, while servants, male and female, were turned adrift (Appendix B. to Third Report of the Relief Commissioners, 1847).

In any future occasions of scarcity, it would be well if officers superintending operations were instructed to make from time to time a classification of the poor, for the subject is one that requires attention. So far as information at present goes in seasons of drought not extending to absolute famine, Government may leave almost entirely out of its calculations the great agricultural classes and confine its attention to the industrial and laboring.*

* Of course where the crops totally fail, the agricultural population directly affected must either be maintained or they emigrate. This was very widely the case in Bundelkhund and part of the Doab in 1837; it was the case in Rajpootana on the late occasion, and partially elsewhere there was a tendency in the same direction.

COMPARATIVE PRESSURE ON THE SAME CLASSES OF SOCIETY AT DIFFERENT PERIODS.

COMPARATIVE PRESSURE AT DIFFERENT PERIODS.

North-West Provinces.—Colonel Baird Smith.

1837 AND 1861 CONTRASTED.

57. On another point indicative of social condition and material prosperity, the two famine periods under comparison show marked contrast. No sooner had the serious pressure of the famine begun to be felt in 1837-38 than the ordinary bonds of society seemed to be broken by it. Beginning in Rohilkund, the population gathered into bands for plunder, and, driven desperate by starvation, they everywhere attacked the grain stores in the larger villages and towns, and carried off their contents. Spreading rapidly, the disorganisation soon reached the districts of the Lower Doab, and deplorable confusion is described as having prevailed from Bareilly to Allahabad. Troops had to be moved out on some occasions, and during the whole course of the famine a largely augmented police force, both of horse and foot, had to be kept up to maintain the peace, a duty which, however, was very difficult to perform against large bodies of men whose natural instinct for fight or plunder was quickened by the sense of their own sufferings, and the sight of those of their wives and children. Of such disorganisation as this we had no signs during the famine of 1860-61, and though this may in part have been due to the influence of military operations too recent to have lost their moral effect, yet I believe it was much more due to the far healthier condition of native society now than then.

58. It is not my intention to reproduce here the harrowing, and in many instances most revolting, illustrations of the greater and more terrible mortality of the earlier famine which have come under my notice in collecting materials for this comparative view of the two periods. From every large station the testimony is the same, and the witnesses are so varied, and of condition so unimpeachable, that making every allowance for the excitement of the time, it is impossible to doubt the general fidelity of the sad pictures they present. The impression given is, in truth, that the calamity was of such intensity and magnitude as to have been really unmanageable. While, for example, the daily burials by the police at Agra are reported to average nearly 400, numerous observers draw attention to the profusion of bodies near the river and along the roads. I annex below a general order,* which gives a

* General Order by His Excellency the Commander-in-Chief, Head-Quarters, Simla, 6th April 1838.

"The Cawnpore division order of the 9th ultimo, directing the commissariat officer in charge of the Sudder Bazar to hire a boat with a small establishment, for the purpose of being employed in removing to some distance below the station the numerous dead bodies which have collected on the bank of the river, or which may hereafter be thrown ashore, is, for so long a period as the measure may be considered necessary, confirmed."

painful stamp of reality to like descriptions from Cawnpore, and in the appendix will be found details from Futtigurh, confirming the same mournful conclusions. The official reports of settlement officers abound with references to the devastation and waste of life of which they had incontestible proofs in the course of their duties in the interiors of districts. Of Etawah, Mr. Martin Gubbins writes, in 1841: "That the population has been very sensibly reduced by death is abundantly evident from the still deserted houses and abandoned lands, as well as from the general fall of rents throughout the district. This latter fact sufficiently indicates the competition, not of cultivators for land, but of landholders for cultivators, and it will no doubt require the lapse of many years to replace the population that has been swept away." Of the other bad districts, like evidence might be produced, but it is needless to give more than samples of such results. The general mortality cannot, of course, be known now, with any approach to precision, but I doubt if it were less throughout the entire famine tract than about 800,000. The poorer landholders who in 1860-61 were just able to struggle through the time of greatest need, suffered in 1837-38 as bitterly as did the mere laborers and artizans now. Large numbers of them died of starvation, and I find it specially noted that among the 80,000 paupers employed or supported by the Magistrate of Agra a very large proportion was of small proprietors. This was the natural result of their social condition at the time, as before described. Their land was utterly valueless unless they could cultivate it; it had no market price, for no man would buy it or make advances upon it as security, so that their only resource was to become paupers or perish.*

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* "It was impossible," says Mr. Rose, in his settlement report on Cawnpore, "to have met this calamity in a more liberal and humane spirit than the Government evinced on the last occasion, 1837-38. But still, at least as regards this district, there were two errors committed which may be avoided hereafter on a similar occasion.

"The first error was leaving the superintendence of the labour of the starving poor in the hands of the local civil officers, instead of appointing to that duty an engineer officer with a large and efficient establishment of subordinate Europeans to assist him. It is short-sighted economy when the Government have to employ a starving population not to go to the expense of entertaining an establishment sufficiently able and extensive to insure that their labour is well applied. In this district it is useless to deny (and I make the acknowledgment with less hesitation, because it chiefly reflects upon myself) that the advantages derived from the labour of the working poor in 1838 were far from commensurate with the expenses incurred, and that nothing like that profit which would have resulted under a more efficient superintendence was obtained.

"The second error was, in not being sufficiently explicit and early in making known to the people the extent of negative relief intended to be granted by means of remission of revenue. It is true little or nothing was collected by Government until the spring (rubbee) harvest was ripe, and the people were early told they were to expect leniency. But the collector could not tell them, unfortunately, what amount of remission it was intended to allow; and whilst he was prosecuting his inquiries to determine that point, the landlords, never before having experienced or even heard of such sweeping remissions as were ultimately granted, and expecting in their most sanguine hopes nothing beyond a remission of 10 to 20 per cent. of the revenue, continued to press their cultivators for the rents; thus driving away thousands who, if unmolested, would have remained in their villages, and by means of artificial irrigation would have raised a sufficient spring crop to subsist on.

"Should the country, therefore, ever be again visited by a similar calamity, I would recommend; as a first step, that the total suspension of all demands for the November and December instalments should be proclaimed, provided the landlords adopted the same course towards their cultivators; and that the duty of the native revenue officer and the collector should be limited to ascertaining how far the landlords adhered to that provision, and taking, of course, when they deviated therefrom, a fair proportion of the rents exacted by them from the cultivators.

"When the spring crop came into the market, it would be ample time to determine what each estate should pay. Nor is there any danger that such a course would cause undue loss of revenue. The scramble between the native revenue officer and the landlords to forestall each other in getting

59. Contrasted from these different points of view, the general conclusion regarding the two famine periods is, that as in all the material conditions by which intensity of suffering is decided, 1860-61 was fully equal to 1837-38, while in some of the most important, as price of food and mass of population for example, the latter was decidedly in a worse position than the earlier period, the actual sufferings of the community ought to have been greater now than then. Yet we know that this was very far from being the case, whether that intensity be measured by the sacrifices entailed on the State, or by proofs of misery visible among the people. Neither will revenue have to be abandoned now to an extent at all comparable with what was needful then; nor has society become disorganised; nor have the people died in any such terrible proportions; nor will the influences of the suffering, mournful though in many instances it has been, continue so long; nor has the great body of the humbler proprietaries collapsed under the greater pressure; and these results lead directly to the more close consideration of the causes to which differences so marked are to be attributed. No part of the subject will guide us more immediately, I believe, to sound remedial measures than this.

60. Foremost, then, among the means whereby society in Northern India has been so strengthened as thus to resist with far less suffering, far heavier pressure from drought and famine in 1860-61 than in 1837-38, I place the creation, as it may almost literally be called, of a vast mass of readily convertible and easily transferable agricultural property, as the direct result of the limitation for long terms of the Government demand on the land, and the careful record of individual rights accompanying it, which have been in full and active operation since the existing settlements were made. I have before described the condition of agricultural property antecedent to these settlements, and it will probably be admitted, without serious qualification, that a state of things more likely to weaken the society living under it could scarcely be conceived. To the great and unequal pressure of public burdens, to the hopeless confusion or ambiguities of title, to the frequent and arbitrary interferences then prevailing, have succeeded assessments rarely heavy, generally moderate, and in many instances extremely light; titles minutely recorded and easily understood, long leases, and the guarantee of the enjoyment of all profits during the currency of such leases. The natural results of such a change in so vital a part of the social economy have grown steadily more and more apparent. Land has obtained an increasing marketable value. Its value as a security has doubtless been largely made use of in mitigating the pressure of the

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hold of the rents would cease, and instead of the desire to exact all he could out of the tenant, the landlord would be impressed with the idea that the more lightly he dealt with his people, the more considerately would he himself be dealt with by Government."

As regards works, the first of these errors has been carefully guarded against in 1860-61, and I believe the remissions also have been so managed as to give substantive relief, though the greater landlords have been expected to pay their full quotas, and have done so to the great advantage of the revenue, and in full proof of the value of a class of capitalists between the State and the cultivator. District officers have, however, told me that they have constantly had their offers of remission or suspension of demand resolutely refused by proprietary communities, apparently under the fear of in some way or other compromising their rights by failing to pay their revenue.

On the whole, I believe the relief system to have been better organised, better worked, and more wide-spread in its beneficial action in 1860-61 than in 1837-38.

famine. Beneath the surface there is continual change of proprietorship in progress. Sales of land for arrears of public revenue have almost disappeared from the public records, while sales by voluntary action or in satisfaction of debts have vastly increased. These mutations almost uniformly indicate the healthy gravitation of capital to the land, and though some may mourn over the gradual but certain displacement of an ancient proprietary with all its traditional memories, the revolution will advance just as surely as in the struggle of life, industry, thrift, intelligence, and wealth must displace indolence, extravagance, intellectual stagnation, and poverty. The general tendency of local influence is to check this process, but the effort is idle, and may be mischievous. The action itself is, in so far as the stability of society is concerned, matter for congratulation rather than matter for regret, and it is determined by natural causes which can no more be interfered with arbitrarily without damage, than can the natural laws regulating trade in any other forms. Whether we will it or no, however, the gradual growth of monied classes, and the progressive tendency of such classes to seek investments in land, are sure to bring the soil and the capital of the country more and more closely into an union, to be fruitful ultimately in the most beneficial results to all.

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38. Speaking in general terms, therefore, native society in the North-West had to face the calamity of 1837, debilitated by a fiscal system that was oppressive and depressing in its influences; and with its agricultural population generally discontented under the extreme confusion into which by the action of both revenue and judicial systems all their most treasured rights had been thrown. In India we all know very well that, when the agricultural class is weak, the weakness of all other sections of the community is the inevitable consequence. Internal trade was burdened and harassed by cumbersome duties, and carried on under difficulties of transport which in such a crisis must have been almost paralysing. External commerce had for many years prior to 1833-34 been virtually stagnant; the growth, both of imports and exports, which has now reached such magnificent proportions, had then barely commenced with the removal of the restrictions on the Indian trade in 1833. * * * *

Making, therefore, every reasonable allowance for the intermediate increase of population, the conclusion seems still irresistable, that the material condition of all affected by external commerce must have been much lower during the famine of 1837-38 than during that of 1860-61.

North-Western Provinces, 1860-61.—Colonel Baird Smith.

30. The general rate of wages for labor has been rather falling than rising in these Provinces within the last twelve months. Immediately after military operations lulled in 1858, vast expenditure had to be incurred in providing shelter for the European army, and under circumstances which made time more important than money. Wages were at that time, and for about a year and a half or two years subsequently, unusually high, but on the cessation of the cause, the effect ceased too. Wages have generally, therefore, fallen back to their previous standard, and the result of all the inquiries I have made, both within and without the famine tract, goes to prove that the tendency is still rather to fall than to rise. Of course within the famine tract labour is at present a drug in the market, and much of it is employed in charity by the Government on wages just sufficient to sustain life. In the districts around the famine tract all extraordinary demand for it has ceased, and even there the usual supply has, as before explained, been sensibly increased by emigration from the suffering districts. Such an increase would of course naturally lower wages, especially as people fleeing from starvation are likely to be very ready to take simple food as sufficient wages. So far then as the general state of wages in these Provinces affects the Manchester trade, it must tend to increase the existing dulness.

31. The chief consumers of English cloths here are all classes near to open and easy lines of communication, be they by land or water; a comparatively small section of agriculturists being the upper grades of the class at a distance from such communications, a very large proportion of the inhabitants of towns and cities everywhere, and of course the whole of the European community. The mass of the agricultural and the poorer non-agricultural classes have scarcely yet become the customers of Manchester at all, though it is merely a question of time and internal improvements of roads and rivers when they shall become so. Within the famine tract, it is those classes, as I have already had occasion to explain, on whom the most pitiable burden has fallen, and among the sufferers none are more commonly met with or more helplessly prostrated than the great body of the native weavers. They are at all times a poor and are said to be generally an improvident class. Next to ordinary agricultural labourers they are the most common inmates of our relief-houses, and so completely dead is their trade for the moment, that I have heard of cases of their wandering about with supplies of their handiwork, offering it in exchange for a meal for their women and children, though its value under ordinary circumstances would be tenfold what they were content to take for it. I have not succeeded in obtaining any statistics of the native cloth trade to which I can attach any particular value. The general destruction of district records during the mutiny has met me here, as everywhere else in the course of this inquiry, as a most obstructive impediment; and it being obviously impracticable for me to take up points requiring a long time to work them out in full detail, I have generally passed such by. In connexion with the present point, however, I have been able, by the kindness of Mr. Fred. Gubbins, the Commissioner of the Benares

Division, to procure data from which I have compiled the two charts given in the Appendix as Nos. IV and V.* They illustrate the comparative prevalence of Manchester and native cloths in the two large and important districts of Azimgurh and Ghazeepore, and though the work is confessedly rough, and might be much improved in a farther attempt of the same kind, the results are not without interest. The method of test employed was to take from 15 to 20 villages, indiscriminately, in each sub-division of the district, and out of each village to examine a recorded number of its inhabitants, noting how many were clad in Manchester goods, how many in native cloths, and how many in a mixture of both. From these observations averages applicable to the whole population were deduced, and the results are given in detail in the charts. The deductions are based upon about 22,000 separate observations, and this fact will shew that, imperfect though the work may be, it implies a large amount of labor to make it even what it is. I need only draw attention here to a few general results. It is to be

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* APPENDIX IV.—[ABRIDGED.]

Abstract Statement, showing the comparative prevalence of English and Native cloths in the district of Azimgurh.

Total population of each pergunnah		1,653,251
Total number of persons examined at each pergunnah ...		13,818
Proportion of persons examined clad in ...	Manchester goods	5,977
	Native goods	6,764
	Mixed goods	1,077
Proportion of total population clad in ..	Manchester goods	773,026
	Native goods	789,168
	Mixed goods	101,057
Average percentage clad in	Manchester goods	36
	Native goods	35
	Mixed goods	9

APPENDIX V.—[ABRIDGED.]

Abstract Statement, showing the comparative prevalence of English and Native cloths in the district of Ghazeepore.

Total population of each pergunnah		1,440,585
Total number of persons examined at each pergunnah ...		8,071
Proportion of persons examined clad in ...	English cloth	5,234
	Native cloth	2,737
Proportion of total population clad in ...	English cloth	808,129
	Native cloth	622,456
Average percentage clad in	English cloth	52
	Native cloth	48

noted that both Azimgurh and Ghazeepore are among the oldest of our possessions in these provinces. They are rich and fertile districts, exporting chiefly sugar, opium, and some indigo. Both have considerable native cotton cloth produce, and Azimgurh has long been notable for its looms. They have water carriage by the Ganges, Gogra, and Goomtee, and their roads have received rather more attention than usual. They bore some share in the disturbances of 1857 and 1858, but with these exceptions life and property have been safe within them for considerably more than half a century. They are lightly assessed, and on the whole are good types of thriving districts. Under these conditions, it appears that in 1861 Manchester clothed entirely 773,000, and partially 101,000 more, out of a total population in the Azimgurh district of 1,653,000, leaving 789,000 to be clothed wholly, and 101,000 partially, by native weavers. We have some details of the condition of Azimgurh 25 years ago, given by an authority no one will be inclined to impeach, as they are to be found in the late Mr. Thomason's well-known Settlement Report of the district, and the data for the native cloth trade are supplied by the present Lieutenant-Governor of the Punjab. In 1836-37, then, the population of Azimgurh was estimated by Mr. Thomason at 800,000. It was certainly much underrated, however, and was probably rather over than under 1,000,000. Of this population, whatever it may really have been, Mr. Thomason states expressly that none but the more wealthy classes wear anything but the produce of the district, and the number of these seems to have been so small, that in estimating the quantity of cloth available for the population, he leaves them out of account altogether. Now there is not a sub-division of the district into which Manchester goods have not made their way with greater or less vigour. In the chief sub-division, which contains the capital and other large towns, about 77 per cent. of the population are clothed in them; and even in the strongholds of the native weavers, where upwards of 4,000 looms were at work in 1836, 62 per cent. of the people now wear English cloths. Whatever allowances for possible errors of figures may be necessary, the broad result of a remarkable increase of the trade is sufficiently clear, and its proportional distribution only gives additional point to the call for increased facilities of communication, as the absorption is ever largest where they are greatest. I have adopted in the chart a simple device by which that distribution will, I hope, be clearly represented and easily understood.

In the district of Ghazeepore the results have been very similar, and there, too, the Manchester trade has made striking way. Out of a total population of 1,440,000, it supplies clothing for 808,000, or 52 per cent., leaving 48 per cent. to be clad in the produce of native looms. Those who desire farther details will find them in the Appendices.

These districts are not average ones, and I have not yet been able to procure corresponding data from others in less fortunate positions, from which a tolerably reliable average might be deduced. But on the strength of considerable personal knowledge of a large number of the districts concerned, of their means of communication, the material condition of their people, and the circumstances generally that would influence the growth of the Manchester trade within their limits, I am

inclined to believe that less than one-third of the field open to its operations has as yet been taken possession of, and I am confident that, when the comparative plenty of ordinary seasons is restored, and the march of internal improvement can be resumed, there lies before the trade a growth as steady and perhaps even more rapid than it has previously known.

Orissa, Enquiry Commissioners' Part III.

22. The cereal agriculture of Bengal has probably in no way materially improved in its character in the last century, or at least we may say that in no part of India is there so little improvement in the mode of cultivating food grains. Artificial irrigation is less common than in other provinces. There are no wells; tanks there are and a few bunds or dams, but they are little used for irrigation, nature usually giving the means of a tolerable crop without such assistance. Any wealth which has accumulated in the hands of the higher classes of ryots who exist in some districts, has been principally turned to the cultivation of sugar (both date and cane), red pepper, and other luxuries, and of the mulberry for feeding silkworms, and jute or oil-seeds for purposes of exportation. The cultivation of food has increased with the population, but it may be said that in every way rice is cultivated exactly as it was a hundred or a thousand years ago, and the yield is probably not larger. In the north, the south, and the west of India, the people during periods of peace and prosperity, have made wells and other works which gradually add to the productive power, and *pro tanto* ensure its constancy; and in both the north and the south Government has contributed great works of irrigation. In the east it has not been so. The climate does not, in ordinary years, stimulate to the same exertions which are required in more arid countries; the people are less energetic, and tenures of the land are not generally in all respects favorable to improvement.

23. The holders from Government under the permanent settlement are now not unfrequently separated by two or three removes of middlemen from all those who have any practical connection with the agriculture of the country, and the establishment of their proprietary character has led to a devolution of rights, without reference to fitness to men, women, and children, and to a sub-division and complication of interests which is absolutely bewildering, and which, while it renders improvement very difficult, makes litigation the chronic condition of the tenure of land in Bengal. If fixed property of a superior degree is in some respects an improvement on the condition of a hereditary office-holder, in other respects the proprietary family is less favorably situated than the office-holders selected from among the family. There is no system of management by selected representatives of families and communities as in Northern India.

24. Passing over the various kinds of intermediate tenures, it may be said that in large estates so far from the actual management being in the hands of persons whose interests are more permanent and whose action is more considerate than in other parts of India, it is

just the other way. Where not infeudated in the manner which we shall shortly describe, the estates are generally let out in considerable portions, for a limited number of years, to speculative farmers of the rents which may be realised from the ryots. Indeed so established has this custom become that when such estates of minors and others come into the hands of Government in the courts of wards, they are thus let in farm as a matter of course. The tenures of the ryots again have been settled and recorded in the offices of Government, in Bengal as not in Orissa they have been the subject of very much uncertainty and litigation, and in most cases the present mode of improving an estate is simply by enhancing rents, without any attempt at improvement of the soil on the part of the superior holders; excepting only the grant of favorable leases in jungly estates to persons who clear jungle at their own expense. The duties of a landlord are not those of a British landlord. No portion of the expenses necessary for successful cultivation are borne by the landlord. The only capital invested by him and his middle-men is sunk in litigation.

25. With all this, the great extension of the breadth of cultivation is beyond doubt. The area cultivated has certainly enormously increased. But the general opinion is that the population has also very greatly increased, and the mass of people to be fed is thus much larger than before.

It may further be a question whether the modern conditions of society are more favorable than those which before existed in the case of extreme scarcity. Sir H. Strachey puts it thus in the evidence [1812, Select Committee, House of Commons], from which we have already quoted: "During a great famine, dependence, slavery and captivity are for the poor highly enviable," and without going quite so far we may say that the creation of a body of, in some sense, independent laborers for wages increases the difficulty of abnormal seasons. We doubt if English laborers could as well resist a season in which food should be two and three times its ordinary price, as do the people of India.

Such then being the conditions of agriculture and population in Bengal, it may be that a failure of the rains, such as has before occurred, would leave the province without a sufficiency of food for its inhabitants.

* * * * * *

27. Altogether, gloomy as the view may seem, we must express our belief that if the same calamity, which happened in the last century to Bengal and last year to Orissa, had happened last year to Bengal also, the failure to supply by importation, which resulted in Orissa from want of information and other causes, would have occurred in Bengal from the want of any adequate source of supply, and that rich Bengal with abundance of money would have perished for want of food. That country is probably less liable to partial famines than drier countries, but it may be that it is equally liable to great famines. It is much easier to state the evil than to supply a remedy for this state of things; but it is best to look the evil fully in the face, since the natural calamity which has happened in one century may happen in another, and if we cannot prevent it we may probably in some degree mitigate it.

Certain social changes inducing a greater liability to famine.

ORISSA, 1866.—FAMINE ENQUIRY, COMMISSIONERS' PART III, PARAS. 63-64.

All precautions taken and all improvements made, poverty, scarcity, and famine must still, as the world is now constituted, recur, and it remains to consider how these misfortunes are to be dealt with.

We have already alluded to the effect of changes which, while rendering the person more free, society more advanced, and labor in one sense more independent, may also, by loosening the ties of personal inter-dependence, render the poorer classes less capable of withstanding calamities of season. We must repeat a doubt whether the laboring classes of England or France could withstand a general enhancement of the price of food to twice or thrice its ordinary price, as do the Natives of India. Suppose the price of wheat to be suddenly raised to 120 or 150 shillings per quarter, beef and mutton to half a crown a pound, and all other articles of food in proportion, what would be the state of things then or even long before that point had been reached? That is in fact much the same thing which occurs in India when rice in Orissa or wheat at Agra rises to 11 or 12 seers per rupee, and yet up to that point the people of many districts of India seem to be now, under favorable conditions, prepared to bear up for a time. But we must not blind ourselves to the fact that every step in advance, in the modern sense, tends to render them as dependent on daily wages as more civilised laborers. Under the purely Native system, almost every man is more or less a farmer, or the immediate personal dependent of a farmer who has his banker and his banker's book and the credit which enables him to live from year to year, rather than from day to day. But all our commerce and our enterprize, our great works and improved systems, create or increase the class of laborers depending on regular wages; and all increase of private wealth, enabling the richer to entertain laborers who are no longer slaves or serfs, adds to the class. If we should succeed in simplifying property in land in the hands of sole proprietors of considerable estates, the mass of the peasantry must either become laborers for hire or tenants-at-will, whose rents are regulated on commercial principles, and who have no longer the beneficial interest in the soil on which their present credit is founded. It may be that, with the increase of general wealth, the laborer will eventually be, in ordinary times, better off than he ever was before, but that he will as well resist extraordinary seasons we do not deem probable. There is, we believe, reason to expect a gradual increase in the classes who may hardly withstand a scarcity not amounting to that extreme famine which involves the whole population.

On the other hand, if the accumulation of wealth increases the number of rich and charitable residents of large towns, the need on the part of the rich for luxuries before unknown very largely increases; the feudal inter-dependence of the people diminishes as Native rulers are exchanged for proprietors, and the Native public endowments and charities diminish in number and in efficiency when no longer supported by Native governments and official superintendence. On the whole, the sources of voluntary relief of the poor are probably diminished.

N.-W. P., 1868-69.—Mr. Henvey's Report.

The second principal reason* [for liability to famine in the North-Western Province] is, that there are large and, it is believed, increasing numbers of people who are dependent for a livelihood on daily wages, and liable to be thrown out of employ as the pressure of high prices grows. According to the returns of the census taken in 1865, the North-Western Provinces contain a population of over 30 millions, or 361 to the square mile, a proportion scarcely attained by the most flourishing countries in Europe. Of the whole population, the industrial and mere laboring classes numbered more than 7½ millions, or one-quarter. The majority of these people may be said to live from hand to mouth. The wages even of a skilled handicraftsman rarely exceed eight pence a day, while the field-laborer receives two pence or three pence. Of course, in comparing these wages with the rates prevalent in Europe, it must be remembered that the necessaries of life in a tropical climate are few and simple, and that in good seasons some sort of grain can be got for a very low price, occasionally as low as 80 pounds for a rupee. But the tendency of famines is to bring the prices of all food, whether coarse or fine,† to a commonly high level, and it will therefore be readily understood that when wheat is selling at 8 seers or 16 pounds for a rupee, a man who earns a rupee once a fortnight must be hard pushed for a living. Nor is this all. When prices rise to famine height the employers of labor contract their expenditure and discharge work-people whom they can no longer afford to support. Thus the weavers, chumars, village artizans, and field-laborers are deprived of employment. Not only is bread dear, but there is no money to buy bread. It is a famine of labor rather than of food. The problem before Government in cases of famine hereafter (that is, in times of pressure not amounting to an entire failure of food-supplies) will be what to do for the relief of the *mazdur* or day-laborer. The remarks of the Orissa Famine Commissioners on this subject are so apposite that they will be quoted here *in extenso* (Vol. I., page 170) :—

Numbers dependent on daily wages.

Density of population in the North-Western Provinces

Tendency of famines to equalize prices of all grains.

Famines now-a-days more of labor than of food.

Remarks of the Orissa Famine Commissioners on the increase of day-laborers.

"Under the purely Native system almost every man is, more or less, a farmer, or the immediate personal dependent of a farmer, who has his banker and his banker's book, and the credit which enables him to live from year to year rather than from day to day. But all our commerce and our enterprise, our great works and great systems, create or increase the class of laborers depending on regular wages, and all increase of private wealth, enabling the richer to entertain laborers who are no longer slaves or serfs, adds to the class. If we should succeed in simplifying property in land in the hands of sole proprietors of

* The first season assigned by Mr. Henvey is the uncertainty of the rainfall both in quantity and distribution.

[† On this important subject see farther at page 250 under PRICES.—J. G.]

considerable estates, the mass of the peasantry must either become laborers for hire or tenants-at-will, whose rents are regulated on commercial principles, and who have no longer the beneficial interest in the soil on which their present credit is founded. It may be that with the increase of general wealth the laborer will eventually be in ordinary times better off than he ever was before, but that he will as well resist extraordinary seasons we do not deem probable. There is, we believe, reason to expect a gradual increase in the classes who may hardly withstand a scarcity not amounting to that extreme famine which involves the whole population."

The same lesson is taught by the scarcity of 1868-69. There was no general failure of food. The agriculturists suffered comparatively little except in Ajmere. The persons who thronged the works and poor-houses were field laborers and artizans.

North-West Provinces, 1868-69.—Mr. Henvey's Report.

One consideration remains to be noticed before the narrative enters upon the immediate subject of this report. In rapid and unfailing means of communication, in the protective power of irrigation works, and in the wealth which several years of profound tranquillity and the system of long-term settlements of revenue had conferred upon the purely agricultural classes, the people of the North-Western Provinces possessed great advantages in comparison with previous seasons of famine. All that elasticity and power of withstanding the pressure of high prices which Colonel Baird Smith observed in 1860-61 was still more perceptible in 1868-69. On the other hand, a remedy for the superabundance of people in famine tracts was formerly found in emigration to other parts of the continent, generally the fertile plains of Central India. In the year 1868-69, however, not only were these provinces encircled (except on the side of Lower Bengal) by tracts in which the drought and scarcity were prevalent in greater or less degree, but the rapid communication, by means of railways chiefly, had tended so to equalize rates that, speaking generally of Northern and Central India, there was no such plenty anywhere as to attract large bodies of emigrants. Accordingly, no considerable movements of the population took place, and whatever suffering there was, had to be endured at home.

Material advantages.

But no outlet for emigration in 1868-69.

Madras Presidency.—From Mr. Dalyell's Memoir on the Famine of 1866. Part I, paragraphs 64-66.

Increase in General Wealth, 1856—1866.

Proof from the rise of prices.

64. Supposing, however, that it be perfectly demonstrated that the country produces sufficient food for its population, and that the means of transit are sufficiently complete to enable the surplus supplies

of one-quarter to be thrown into another to relieve a deficiency, still, if the people are in such a pauperized condition as to be without the means of buying grain, that is to say, if a large proportion of them are in the habit of subsisting upon the smallest quantity of food which will support life, and their average annual gains, whether obtained in grain or money, are only sufficient to enable them to do so, the sufferings produced by a scarcity must always be very severe. This however can hardly be said to have been the position of the inhabitants of the Madras Presidency at the end of 1865, at any rate their position at that period must have been very superior to what it had been in 1845 or 1855, as can easily be demonstrated by a consideration of the general progress statistics of the Presidency.

65. As about three-fourths of the population are agricultural, the price of agricultural produce and the general position of the landed interest must always very largely influence the comfort and wealth of the bulk of the people. The price of rice in India is thus quite as important a matter as the price of corn in other parts of the world. It has been shown in a previous part of this paper that in the early years of the seventeenth century rice had been very cheap, Rs. 87-8 per garce,* being then deemed a fair rate, but that in 1733 it was considered cheap at Rs. 175 per garce,† and that in 1783, when the scarcity of the previous year had passed over, the market price was Rs. 465 per garce.‡ Unfortunately detailed average price lists are not generally available for years previous to 1814, but a reference to those since that year will show that the average price of second sort rice from 1814-15 to 1855-56, or during a period of 42 years, has been Rs. 172 per garce.§ This series of years includes several years of scarcity, when prices were of course unusually high; but if these years be altogether excluded, it will be found that the average will only be reduced to Rs. 164.¶ From 1814 to 1820 the average was Rs. 166 per garce, and from 1820 to 1830, including the famine year 1824, Rs. 188 per garce.‖ From 1830 to 1840, including the famine year 1833, Rs. 188 per garce, and from 1840 to 1850, Rs. 155 per garce.* It will thus be observed that between 1814 and 1840 the price of rice only rose about 13 per cent. on the average, and that between 1840 and 1850 it fell upwards of 17 per cent. In the Bellary district price lists are on record as far back as 1784-85, in which year the price of rice was Rs. 210 per garce,† and except in the two following years, when it reached Rs. 244 and Rs. 226‡ respectively, it was never above this price until 1800. The average price of raggy and cholum during the same period of 14 years was Rs. 98-7 and Rs. 103-4 per garce§ in this district. The annexed statement gives the average price of second sort rice in each district, from 1814 to 1855, and from 1855 to 1865.

* About 9*s.* 9*d.* per British quarter.

† About 19*s.* 6*d.* per British quarter.

‡ About 52*s.* per British quarter.

§ About 19*s.* per British quarter.

¶ About 18*s.* per British quarter.

‖ About 20*s.* 6*d.* per British quarter.

* About 17*s.* per British quarter.

† About 27*s.* per British quarter.

‡ About 23*s.* per British quarter.

§ About 11*s.* and 11*s.* 6*d.* per British quarter.

Districts.	Average per garce of second sort rice from 1814 to 1855.	Average per garce of second sort rice from 1855 to 1865.
	Rs.	Rs.
Ganjam	116	229
Vizagapatam	142	255
Godavery	166	228
Kistna	192	295
Nellore	182	300
Cuddapah	208	374
Bellary	178	357
Kurnool	196	359
Madras	190	327
North Arcot	194	302
South Arcot	172	307
Tanjore	148	284
Trichinopoly	160	339
Madura	176	373
Tinnevelly	186	391
Coimbatore	176	397
Salem	176	330
South Canara	„	304
Malabar	150	357
General Average	172	321

66. It will be seen that during the first period the average price in Cuddapah, Kurnool, and Kistna, was 80 per cent. higher than the average price in Ganjam, whereas the price in the districts of Tinnevelly, Coimbatore, and Cuddapah, which were the dearest districts during the second period, was little over 70 per cent. beyond the price in Ganjam during this period. The average price of second sort rice throughout the Presidency, in 1856-57, was Rs. 226 per garce,* or about 30 per cent above the average of the previous 43 years, and since that date there has been a steady rise in each year, and in 1865 the price was Rs. 431 per garce.† Similarly the price of raggy had risen from Rs. 115 to Rs. 131 the garce during these 10 years, and cholum from Rs. 125 to Rs. 260 the garce. It will thus be observed that during the ten years preceding 1866 the price of all agricultural produce has nearly doubled, and that consequently the agricultural proprietor was much better off at the beginning of 1866 than he was at the beginning of 1856, and that there was a still greater improvement in his position as compared to what it had been in 1846. As nearly the whole of his out-goings, whether for food or wages, are mere deductions from the gross produce of the land, as his family subsisted on the grain raised, and wages are paid in the same commodity, his surplus produce has remained nearly the same in quantity during the twenty years, whereas the market value of that surplus has increased three-fold, if no allowance be made for the depreciation of the value of the precious metals which has taken plac eduring this period.

* About 25*s.* per British quarter.

† About 48*s.* per British quarter.

Madras.—From Mr. Dalyell's Memoir on the Famine of 1866 Part I, paragraphs 71-78.

71. The position of every description of landholder, whether ryot, zemindar, or inamdar, must have improved very materially during the last fifteen years. So far as the first class was concerned, the fall in prices which had taken place between the early part of the century, when the money rates of land-tax payable to Government were fixed, and the year 1850, had had such a serious effect upon their resources that very liberal reductions were then made in the assessment of all the ryotwaree lands in those districts where the rates pressed with severity upon the ryots, or where they were so high as to keep land out of cultivation altogether. A special department for the re-assessment of all districts on liberal and scientific principles was also organized. The position of the Government ryot was, consequently, at once much improved, and the steady rise in prices which has taken place since that period, has of course still further benefitted him, but this latter benefit has also been obtained by the holders of land on other tenures, the zemindar, and the inamdar, and their respective tenants. It has been already shown that an acre of unirrigated land produces on the average 190 Madras measures, or about 5 cwt. of grain, and that an acre of irrigated land produces 370 Madras measures, or 10 cwt. of rice. The Government ryot, therefore, who held, say, 6 acres of 'dry' land and 2 acres of 'wet,' for which he paid, say, Rs. 20 per annum to Government as land tax, obtained for the produce Rs. 105 in 1856, and Rs. 209 in 1866, as noted in the margin. On the other hand, the ryot holding the same extent of land under a zemindar, or inamdar, after giving half the produce to his landlord, obtained in 1856 only Rs. 52-8, the price of 15 cwt. of dry grain, and 10 cwt. of rice in 1856, and in 1866 Rs. 104-8, the price of the same quantity of grain in that year, the zemindar or inamdar in this case taking the balance of advantage obtained by the Government ryot. This improvement in the position of the agriculturist has manifested itself in the very large increase in the area of land under cultivation, for whereas, even in 1856, there were less than ten millions of acres held by registered Government ryots, there were upwards of 16 million of acres so held in 1865.*

1856.	Rs.
Value of the produce of 6 acres of dry land..	50
Value of the produce of 2 acres of wet land..	55
	105
Deduct tax (say) Rs.	20
Rs.	85

1866.	Rs.
Value of the produce of 6 acres of dry land...	104
Value of the produce of 2 acres of wet land..	105
	209
Deduct tax (say) Rs.	20
Rs.	189

72. The number of ryots holding direct from Government has already been given as a million and a quarter, and the returns show that these peasant proprietors had in 1861-62 upwards of a million sub-tenants. Most, if not all, of these sub-tenants hold from Government ryots on the same terms as ryots hold from zemindars, *i.e.*, they pay their landlord not a fixed money rent, but half the annual produce of the soil; hence it may be safely assumed that there are now nearly 2½

* As already shown, but a very small portion of this increase (certainly not more than one-sixth) is attributable to the increased cultivation of cotton, and it is therefore quite a mistake to suppose that the food supply of the country has been at all affected by this description of cultivation.

millions of persons interested in the lands held on ryotwaree tenure direct from Government, who have largely benefitted by the rise in prices adverted to above. With their families, these 2⅓ million landholders and tenants would represent 13 millions of the population, exclusive of the zemindars and inamdars, and their respective tenants, having a direct interest in the land. It has been already estimated that about one-third of the Presidency is occupied on tenures of the latter description, and there is no reason to suppose that the zemindary or inam lands are less sub-divided than the Government lands, so that the proportion of the whole population who are interested in agriculture, *i. e.*, who have some absolute interest in the soil, would seem to have been understated in 1861-62, when the whole agricultural population was put down at under 18 millions. If there be, as roughly deduced above, thirteen millions of persons dependent on agriculture in two-thirds of the Presidency, there should be seven millions of the same class in the remaining third, and, including the agricultural laborers, the agricultural population of the whole Presidency might perhaps be estimated at 20 millions, or four-fifths of the whole, instead of about three-fourths as given in the existing returns. It is hardly likely, however, that such a serious error should have been made in the census returns, and a more probable explanation perhaps would be that five is too high an average to take for the families of ryots, and that the class of agricultural laborers having no direct interest in the land, beyond their wages, is an excessively small one. In support of the latter presumption, it has already been shown that no less than a million landholders pay less than Rs. 10, or 1*l.* per annum to Government as land tax, so that their holdings are of course on much too small a scale to require any hired labor for their cultivation.

73. But be this class large or small, the position of the agricultural laborer, and indeed of all those dependent upon wages, had not at any rate seriously deteriorated during the 10 years preceding 1866, though the enormous increase which has taken place in the price of food must press hardly upon those trades for which the remuneration is fixed by custom at a certain rate in money. When reporting on this subject about three years ago, the Board of Revenue, after communicating with the Collectors of districts, stated that as a rule all agricultural laborers were still paid in grain, and that these grain wages had not risen materially during late years. As to other classes of laborers who were paid in coin, they observed that their wages had risen considerably, and that the increase had then kept full pace with the enhanced price of food. Compared with former rates, the wages were stated to be in some cases double what they formerly were, but the general proportion of increase was 50 per cent., and only in a few cases had the increase been as small as 25 per cent. These conclusions are borne out by the increase which has taken place during the last fifteen years in the pay of all domestic servants in the families of Europeans in India.

74. The position of that portion of the population whose wealth is derived from mercantile operations, has improved, at any rate, in an equal ratio with that of the agriculturist, if we may judge by the progress which has taken place in the trade of the Presidency. The principal portion of this trade is carried on at the port of Madras, that is, about one-half of the export trade and two-thirds of the import trade.

The greater part of the balance of the export trade is from the ports of Coconada, Negapatam and Tuticorin, on the East Coast, and from Calicut, Cochin and Mangalore, on the Western Coast. Large exports of cotton take place from Coconada and Turicorin, and of grain from Negapatam, whereas the principal articles of export from the western ports are coffee and oil-seeds. The principal item of import at most of these ports is piece goods, though grain is also largely imported into the Malabar District.

75. In 1856-57 the total value of the imports to the Madras Presidency, exclusive of bullion, was about two millions and a third, sterling (about 2*s*. 3*d*. per head), the exports being valued at upwards of 3½ millions (about 3*s*. per head). In 1860-61 the imports had risen to nearly 3½ millions, and the exports to 4½ millions, and in 1865-66 the imports stood at 4¾ millions (nearly 4*s*. per head), and the exports at 9 millions (upwards of 7*s*. per head). The value of the trade has thus more than doubled during the ten years, a rate of progress which will bear comparison with the advance made by the trade of almost any other country in the world during the same period. In the seven years preceding the war, the trade of the United States only increased by 40 per cent, and the trade of France only increased 50 per cent. between 1860 and 1865. It must be borne in mind, however, that the cotton famine in England gave an extraordinary stimulus to the cotton trade of India during some of the years under notice.

76. The principal articles of the import trade are piece goods, metals, twist and yarn, grain and pulse, and timber and planks. The chief articles of export are cotton, wood, indigo, grain and pulse, fruit and nuts, oil and seeds, coffee and sugar; the value of the exports in these articles during the last five years is given in the following table:—

ARTICLES.	1861-62.	1862-63.	1863-64.	1864-65.	1865-66.
	Rs.	Rs.	Rs.	Rs.	Rs.
Cotton wool ...	1,70,40,215	2,38,12,882	4,47,18,112	4,04,18,937	4,84,16,348
Indigo	48,69,090	51,67,234	40,37,259	33,35,915	34,57,070
Grain and pulse ...	60,24,113	54,69,050	70,08,263	77,67,378	78,29,404
Fruits and nuts ...	35,83,950	39,04,817	38,91,613	40,31,784	24,34,011
Oils	16,48,565	27,16,880	37,12,229	25,07,457	15,43,435
Seeds	26,29,795	36,50,033	26,61,306	27,57,538	22,69,161
Coffee	47,10,369	53,55,681	65,55,671	76,84,938	78,13,813
Sugar	22,74,519	19,18,694	25,51,907	22,40,901	13,36,572

It will be observed that until the mercantile crisis which occurred in 1865 and altogether paralysed trade there had been a steady annual increase in the export of most of these articles. These figures may be taken as an indication that the mercantile classes in this Presidency are steadily increasing in wealth, and the general increase in imports may also be taken as affording evidence of an increase in the general wealth

of the whole population. The value of piece-goods imported in 1865-66 was upwards of a million sterling, against goods of the same kind imported in 1855-56, of a value of not much more than one-third of that amount, *i.e.*, in 1855, each person on the average spent a little less than 3½*d.* on these goods, whereas in 1865, taking into account the increase in the population, they each spent upwards of 9½*d.* These figures are not however strictly correct, as no doubt a considerable portion of the Hyderabad and Mysore territories are supplied with piece goods from ports of the Madras Presidency, and the population of these territories is not included in making the calculation. Further, the consumption of the home-made article has fallen off considerably during the period under consideration, as the hand-made goods cannot compete with the machine-made.

77. If any further evidence be required as to the great advance in wealth which has been made by all classes of the population in the Madras Presidency during the past ten years, beyond what has already been afforded by the foregoing remarks upon prices, land tenures, and trade, it may easily be obtained from a consideration of the progress of the revenue during this series of years. The land tax, which forms the principal item of revenue in the Madras Presidency, whatever it may have been in former years, must have been sensibly alleviated in late years, and the pressure of taxation of other descriptions is by no means heavy. The total revenues of the Presidency were a little over 4¾ millions sterling, or 4*s.* 1½*d.* per head, in 1856-57, and had risen to upwards of 6¼ millions, or 5*s.* per head, in 1865-66,* although the transfer of the district of North Canara to Bombay in 1862-63, and the abolition of the Moturpha, or professional tax, in the same year reduced the revenue by £250,000. The true increase of revenue during the ten years may therefore be fairly set down as reaching nearly two millions sterling. Of the total revenue of 6¼ millions, 4¼ millions are derived from the land-tax, against about 3½ millions obtained from this source in 1855-56. Nearly half a million is obtained from the tax on spirituous liquors, though less than a quarter of a million was obtained on this account ten years ago. As this revenue is rented out to farmers who purchase the exclusive privilege of manufacturing country spirits and selling them at certain minimum prices fixed by Government, it is clear that the increase of revenue must be ascribed to a largely increased consumption, probably owing to an accession of wealth to the agricultural and commercial classes. The taxation on this account has risen from under 3*d.* per head in 1855, to nearly 5*d.* per head in 1865.† The large increase in the revenue derived from the salt monopoly is also indirect evidence of an improvement in the condition of the lowest classes of the people, who in former years can hardly have consumed a proper quantity of this necessary of life. The salt revenue is now upwards of a million sterling, though in 1855-56 it was little over half a million. This large increase is in part to be

* In Switzerland the revenue is 6*s.* 5*d.* per head, in Turkey 8*s.* 4*d.*, but in few other European countries is it less than 1*l.* per head, and in Great Britain it is £2-8-9.

† The excise taxes in Great Britain amounted to nearly 20 millions in 1865-66, or about 13*s.* 4*d.* per head. The proportion levied from liquors was probably about 9*s.* per head, as in 1850, three-fourths of the excise duties were raised from this source.

ascribed to the increase of price from one rupee to Re. 1-11-0 per maund of 82 lb., but the quantity actually consumed in 1865-66 was about 500 million lb., whereas in 1856-57 not more than 400 million lb. were consumed. The population in 1856-57 was 23 millions, so that the consumption of salt was then about 17 lb. per head per annum, and it is now 20 lb. per head. A large proportion, however, of the salt manufactured in Madras finds its way into Mysore, the Central Provinces, and the Hyderabad territories, and the actual consumption is not more than 16 lb. per head. The contribution of each person to this branch of the revenue is thus about 8*d.* per head.* The revenue from stamps has also largely increased since 1856-57, having risen from £70,000 to upwards of £280,000 The increase is in part owing to an augmentation of the rates of duty, but the revenue has steadily increased since 1862, when the present rates were adopted, having risen by upwards of 50 per cent. since that year. This increase may also fairly be taken to indicate an advancement in the wealth of the people. The revenue from customs fluctuates with reference to the rates of duty imposed, and though the trade, as already shown, has largely increased, the revenue from this source is considerably below what it was in 1859-60 or 1860-61.

78. On the whole, then, it is impossible to arrive at any other conclusion, than that the mass of the population of the Madras Presidency have considerably progressed in wealth during the 10 years previous to the famine of 1866. The whole of the agricultural interest, which includes certainly three-fourths, and perhaps four-fifths of the population, were in twice as good a position at the end of this period as they had been at its commencement, and a large number of them had made enormous gains during the cotton famine in England, the ryots of the district of Bellary alone having, it is estimated, obtained an increase to their capital of nearly a million and a half sterling on this account. The mercantile class, or at any rate, such portions of them as were interested in the over-sea-trade, had doubled their business, and the position of the poorest classes had certainly not deteriorated. Further, while private wealth had increased to this extent, taxation had been augmented by less than 25 per cent., so that certainly three-fourths of the increased profits obtained by the population were enjoyed tax free. At the commencement of the distress which will now be described, the people were consequently in a better position than they had ever occupied in any previous year of famine.

Mr. Girdlestone's Memoir, dated 26th May 1868.

[From] Section VIII.—The Lesson of past Famine.

156. **Improbability of another general Famine.**—To judge by the history of the last ninety years, it is most improbable that a general famine will overtake the North-West again without giving due notice of its coming. The whole burden of this narrative goes to show that such a calamity is gradual in its approach. In 1783, in 1803, in 1837, and in 1860, it was not the drought of one season, but of several, which

* The salt tax in the Duchy of Baden is now upwards of a florin (1*s.* 8*d.*) per head, and previous to 1823 it was levied at a very much higher rate in Great Britain.

caused the mischief. During the preceding years the rain had been less than usual throughout the country, at last, and by way of climax, came a year in which hardly any at all fell. The testimoney of former days, too, gives strong grounds for inferring in what places the effects of drought are likely to be worst. Except in 1783-84, Oude has always escaped, and the distress of the province in that year was as much attributable to the presence of starving emigrants as to failure of the crops. Warren Hastings himself admitted that the misery, though great in Lucknow, was considerably less than on the other side of the Ganges. Azimgurh has never been touched, and Goruckpore only slightly, their immunity being in all likelihood due to the superior fertility of the soil and the abundant means of irrigation which these districts possess. Within the present century the Benares Division appears never to have had a drought of importance, and Rohilcund, though it has suffered, has had no distress at all comparable to that of the Doab. The conclusion therefore is that the tract between the Ganges and the Jumna, and certain outlying tracts beyond the latter river, specially Banda, Humeerpore, and the Southern Pergunnahs of Agra and Muttra, run the greatest risk of enduring want hereafter. The facts elicited in the present inquiry incline me to think that the line of the Jumna will always be most affected by an unfavorable season. Through the greater part of its course this river flows in a deep and rocky bed, which prevents its waters from oozing out to the benefit of the surrounding country. Wells, to be effective in its vicinity, must be deep. Add to this that the soil is naturally poor, and many of the inhabitants along its banks are indisposed to honest labor, and the consequences can easily be imagined. It is well to know by past experience what part of the country is most liable to famine, and to be assured that starvation on a large scale never takes the people unawares. But I myself cherish confident hopes that the North-West will never again be subject to such extensive ravages as we read of in old days. The era of great famines is, I believe, at an end in this part of India.* The area of the famine tracts in 1837-38 and 1860-61, though not identically the same, were about equal in extent. In the former year Government certainly lost upwards of 65 lakhs, and probably 90½, and in the latter rather more than 9 lakhs (I include the Punjab in both cases) by remission of revenue. In the interval the means of communication had wonderfully increased. In 1837-38 the Grand Trunk Road was metalled continuously no further than Allahabad. Nothing worthy the name of a road existed in the direction of the Central Provinces, and the intercourse between one district and another was of the most primitive and limited description. What the state of things was may perhaps be better conceived when I mention that, metal and repairs included, the whole sum expended by Government on roads for the year ending April 30th, 1837, was Rs. 65,195! In 1860 the aspect of the country was perfectly different. A net-work of district roads had sprung into existence; the railway had come up to the edge of the North-West; a considerable length of the Ganges Canal had been completed; Steamers were plying incessantly on the Ganges; and the granaries of Jubbulpore, Oude, and Bengal were all accessible by land.

* Before the year 1868 ended famine had set in over a great part of Northern India and the Central Provinces.—J. G.]

Since those days the railway has reached Lucknow, Jubbulpore, and Delhi, and will shortly be unbroken to Bombay and Lahore; so that not only is the whole tract of country, for which we must yet have apprehensions, pierced by the best of all possible highways, but it has all its parts linked together and is in immediate connection with the corn-growing provinces on its borders. Such resources being at the disposal of Government, it will henceforth only have to concern itself with the distribution of supplies within the tract of distress; for the nearer that food can be brought to the homes of the starving, the better in the end for the State.

Central Provinces.—From Administration Report for 1869-70, by Mr. Morris, Chief Commissioner, pp. ii, iii.

The experience gained during the past year has thrown much light on one of the most difficult problems which present themselves in times of scarcity,—the amount of the reserve grain supplies of the country. This subject will be fully discussed in the Famine Report which is now being compiled, but it may be mentioned here that the grain stores in hand when the famine began exceeded expectation, and that their amount varied from district to district according as the means of communications with great grain markets were difficult or the reverse. The granaries of the Nerbudda valley held out well, but those of Chutteesgurh seemed quite inexhaustible.

The enforced accumulations of previous years of plenty became the salvation of this remote tract in the time of scarcity; and paradox as it appears at first sight, it is nevertheless true, that those same natural obstacles which prevented succour from being sent to Chutteesgurh when famine came had prepared this region for the calamity by retaining its surplus produce in its local granaries. The fact is one which it behoves us well to weigh and apprehend. It may be, it no doubt is, the case, that railways and good roads mitigate the severity of famine in the parts where it is more intense; but the case of Chutteesgurh may serve to show us that they may deprive a population of a security against famine which it formerly enjoyed. It is quite certain that had Chutteesgurh been easy of access the high prices of distant markets would have encouraged exports, and the people there would have entered on the year of famine with their grain pits comparatively empty. The answer to this readily suggests itself:—The road or railway which carried off the surplus produce of good years would have restored it in bad. But it might be again enquired would the price of the re-imported produce have been as low as that of grain which never left the country? Would the amount be as large? These are highly complex questions, and though no doubt their solution would show the superiority of the civilised to the uncivilised safeguard against famine, they are not the less deserving the consideration of intelligent observers of the economic laws which control the effects of famine in backward countries.

Central Provinces, 1868-69.—Administration Report of Chief Commissioner (Mr. Morris), pages i to v.

The past year, though marked by continuous anxiety and difficulty to the people and to all interested in them, has fortunately gone by

without very serious calamity. That the pressure of straitened means has told upon the poorer classes, is evident from the statistics of almost every branch of the Administration. The police returns show an increase of 17 per cent. in petty crime; the prison population has increased from 13,308 to 13,695, and yet the average duration of imprisonment has been less; the traffic and attendance at fairs have fallen off perceptibly, the figures for 1867-68 and for 1868-69 being respectively—

	Attendance.	Traffic. Rs.
1867-68	15,23,733	42,76,459
1868-69	13,61,671	35,65,535

Large balances under assessed taxes are accounted for by the ruin or dispersal of the poorer tax-payers; and the revenue realised on salt—the first test of the state of the people—has fallen off so much as to neutralise* the increase from all other heads of a revenue buoyant even under conditions so adverse. Even in those departments in which the degree of advance attained by eight years of gradual labor has been on the whole maintained, there have been unmistakeable indications that progress has been checked, if not absolutely thrown back, by the scarcity which has contracted the means and temporarily depressed the tastes of the people. Thus the number of schools and pupils has not decreased, taking the province as a whole, but in the northern portion of it, where it has always been difficult to excite a popular feeling in favor of education, and where there have been acute, though but short and occasional bursts of distress, the poorer pupils have been largely withdrawn by their parents, who, always disinclined to resign the profits of their children's labor for the sake of giving them instruction, have readily given way to the pressure of scarcity. The land revenue has, it is true, been collected with surprising ease and completeness, but it must be remembered that landholders are compensated to a great extent for loss of produce by the increased price which their surviving crop realises. Thus in Chuteesgurh the price of wheat leapt from 52 seers per rupee in April 1868 to 14 seers per rupee in November 1868, and many cultivators must actually have found themselves enriched by the year of scarcity. In short the losses of revenue, which must eventually be met, will arise not so much from the extent of the failure as from its unequal distribution. Had it affected all in like proportions, the landholding classes would have gained instead of suffering. But in some parts of the country the rain-fall has been so capricious that owners of totally devastated villages have been tantalised by the sight of fair and even abundant harvests on the lands of their immediate neighbours. On the whole, although the revenue has been realised without pressure or difficulty, there have been indications, in the slightly increased number of land sales and mortgages, that the rise in the price of grain has been no benefit to some of the more embarrassed landholders. Though the landed classes are as a rule now well off in these provinces, there are still many who have not yet had time to shake off the burthen of ancestral debt, while others again are too newly established to have accumulated capital of their own, and

* Since the above was written there has been reason to conclude that great part of the falling off in revenue is not due to a decrease of imports, but to a diversion of the course of trade. This subject will be thoroughly cleared up when the Customs Report is received.

there must have been landholders in both of these classes who, having forestalled the market by pledging their crops in advance to money-lenders, reaped no benefit from the high prices which ruled after harvest time.

On the whole, however, it may confidently be said that the majority of the landed class have passed through a season of difficulty with comparative impunity, and this conclusion is the more acceptable that the prosperity of the proprietary body has here a peculiarly close connection with that of the community at large. Not only does the great bulk of the population live by agricultural pursuits, but the custom, which still prevails throughout the country, makes the village proprietor the keystone of the system of social economy. On him the greater number, if not the whole, of his tenants depend for their seed-grain and for the means of subsistence until harvest time, while the artizans and village servants depend in thier turn on contributions of grain from the cultivators. So that unless the proprietor has stores or credit the whole community suffers.

The main sources of their power of resistance have no doubt been abundance of land, markets constantly enlarging owing to increased facilities of communication, and light land revenue settlements. But they have benefited largely by the sympathy and succour which have been so freely extended by the state to all who could possibly need them. It must be never forgotten that the measures initiated by the Government in 1868 amount in fact to a new policy. In the earlier years of British rule State assistance was limited to the native method of remitting revenue, but this under the native system was only one part of a general scheme which turned on a full recognization of the State as landlord. The Mahrattas probably laid more stress on the rights of property than on its responsibilities, but the greater the share which they assumed of the fruits of the soil, the more helpless they left the cultivating classes ; and therefore to prevent an entire collapse of the agricultural system, they were bound to regulate its machinery minutely and watchfully, and in times of difficulty to take almost the whole burthen of supporting farmers who had never been encouraged or indeed allowed the opportunity of standing by themselves. Thence arose the yearly fluctuation of the assessments, to adapt them to the seasons, and the storage of grain in warehouses whence seed and food grain were lent to the people to be repaid with interest at the first good harvest. Our revenue system, even before it had developed a proprietary body independent of the State, leant towards European models, and attempts were made from the first, by fixed revenue settlements on comparatively light terms, to wean the land farmers from their dependence on authority. Hence the Government retired from its position as a grain dealer, and though our system was obviously better calculated to promote the prosperity of the country in the end, it is questionable if at the commencement of British rule the poorer landholders did not sometimes look back with regret to the days when they had to exercise no thought for the morrow. In another important branch of relief—the support of the old and infirm poor—our predecessors had a method which it was not easy to replace. The richer inhabitants of the famine stricken districts or tracts were authoritatively invited to succour their poorer

neighbours, and thus the Government provided for its starving subjects absolutely without expense. The few thousand rupees which the English Government distributed among millions of people in the first outbreaks of distress with which it had to deal were a poor substitute for the enforced charity of hundreds of rich men ; and even the subsequent system of large Government relief works in selected places, and relief committees distributing alms contributed, half from private sources and half from State grants, left a good deal dependent on private impulse, and certainly failed to search out the whole of the existing distress.

The policy adopted during the past year, though in form but a development of former measures, was animated by the bold enunciation of a principle which, if not previously denied, was at least never so unreservedly admitted. The State has now publicly announced its responsibility for the life of the least of its subjects, and has proved to them its good faith by a measure of liberality, regulated rather by the wants of the people than by precedents or calculations. The district officers to whom, living in the midst of the suffering population, manifestations of distress must closely appeal, have not only been encouraged to give free play to their sympathies, but have been warned that they will be held personally answerable for all avoidable loss of life, and it is evident, not only from their reports but from the tangible results of their action, that this charge has been accepted by them, not as a mere formal duty, but in a full spirit of earnestness and devotion, amounting in at least one instance to sacrifice of life.

[*For farther opinions on the condition of the various classes of Society at different periods reference may be made to the compilation on "Systems of Administration, British and Native," Foreign Department,* 1867 *(Replies to Mr. Under-Secretary Wyllie's Circular published as a Parliamentary Blue-book.*]

Memoir by Mr. [Sir] George Campbell on the Famines which affected Bengal in the Last Century.*

The Famine of 1770.

All wide-spread famines in India take their rise in drought, not inundation.

The only occasion on which Bengal Proper has suffered very wide-spreading and extreme calamity from drought since the establishment of British rule, is the Great Famine of 1770, and therefore, as regards the risk of drought, my enquiries have been for the most part concentrated on the event of that year. I may add that all that I have been able to discover fortifies the view originally taken by the Commission, viz., that injuries due to inundation alone have always been, and must always be, in some sense, partial, that is, confined to particular districts or parts of districts; that in India all very wide-spreading famines are mainly caused by drought.

A minute search of the records of the India Office has not led to the discovery of any special reports, in our modern sense, recounting the whole history of the great Bengal famine. It has only been possible by completely sifting the general records to pick out here and there the passages which bear on the calamity. The result is not to give us its history in any great detail, but I trust that enough has been gathered to put us in possession of its general character.

1770. Bengal then prosperous and paying a large and increasing revenue.

2. Far as Bengal was then removed from its present state of wealth and prosperity, it does not appear that the great misfortune of the last century was occasioned or very materially aggravated by other than natural causes. For some years under the protection of British rule the Province had enjoyed peace and security. "If," say the Government of Bengal, writing to the Court of Directors on the 9th of May 1770, "the internal prosperity of these Provinces corresponded with our external security, we should be happy; but it is far otherwise,—not a drop of rain has fallen in most of the districts for six months. The famine which has ensued, the mortality, the beggary,—exceed all description. Above one-third of the inhabitants have perished in the once plentiful province of Purneah; and in other parts the misery is equal."

This particular district of Purneah is in another place said to have suffered from the administration of bad Amils, but Bengal generally seems to have been comparatively prosperous up to 1769 and to have paid a large and increasing revenue.

Course of prices during the past hundred years [1760-1860] in metropolitan and in outlying places.

3. It was remarked in a former part of our Report [Orissa Report, Part III] that the tables of the Fiscal of Chinsurah seemed to show that the average price of rice before the famine of 1770 was not very greatly different from that prevailing in Bengal in comparatively recent times. This is probably true as respects the marts of European commerce on

* From "The Further Report (Part IV) on the Famine in Bengal and Orissa, 1866." Printed Nagpore, 1867). The marginal abstracts are by the compiler.

This memoir on the drought of 1769 (which was remarkably conterminous with that of 1873), is reprinted here for ready reference as the original edition is scarce. Further information will be found in the Orissa Report (Part III) which is in all the Collectorate Libraries.—J. G.

the Hooghly, but the scattered notices regarding the usual price of grain in some of the districts of the interior lead me to think that the observation must be modified as respects such parts of the country; that in fact in remote districts rice was much cheaper in the last century than in recent times, and that consequently the same figures would then represent much greater comparative want than in these times. The truth is, that with modern means of communication prices are much more equalized.

Area of the famine of 1770. The famine severest in Behar.

4. Orissa was not then a British province, and my present inquiry furnishes me with no information regarding its condition in 1770. Nor can I here take account of the possibility that the great want at Madras, which seems on more than one occasion to have immediately preceded want in Bengal, may point to a wider range of the same disturbance of the climatic system of India. As respects the great mass of the countries to the south and west I have no information of their condition at this time. But confining myself to the countries belonging to, or in communication with the Bengal Presidency, the area of the famine of 1770 can be marked out with some precision. Behar suffered in an extreme degree, but it is expressly stated by the officers there that their neighbours did not suffer in the same way—or at least to the same degree. Supplies were drawn from Oude and attempts were also made to procure assistance from the Benares and Allahabad Provinces, which were comparatively better off. It may therefore be assumed that this famine did not in its severest form extend far west of Behar.

Northern, Central, and Eastern Bengal.

Northern Bengal especially suffered. Even from the usually moist north-eastern districts of Rungpore and Dinagepore the accounts are peculiarly distressing. Purneah has been already mentioned; and Rajshahye, Moorshedabad, Rajmahal, Jessore, Hooghly, Bheerbhoom, Burdwan, and Calcutta were all sooner or later involved in the calamity. Dacca is at first mentioned as if it had for the most part escaped, but eventually we have the following specific statement in a letter from Mr. Middleton who was at Dacca on a tour of inquiry after the famine:—"On my arrival here I had the mortification to find this district had not been exempt from a participation in the devastation and distress which the late famine occasioned throughout the province, and although the unhappy effects of the calamity were experienced in a more moderate degree here than in many other parts, yet its being immediately succeeded by a dreadful inundation which destroyed a considerable part of the crops of the last year, was a circumstance altogether unfavourable;" and he goes on to speak of the "impoverished and depopulated state of the country."

Even as respects the Rajah of Tipperah's Zemindaree, Mr. Wilkins, Supervisor of Tipperah and Islamabad, speaks of "the distress his country was involved in by the famine that visited it in common with the other parts of Bengal." The only part of Bengal which seems to have escaped and from which some very scanty supplies were drawn to the western districts was the low south-eastern corner,—the districts of Backergunge and Chittagong.

With the exception then of this comparatively small south-eastern tract, the famine involved in greater or less degree the whole of Bengal and Behar.

5. In tracing the course of the famine, I find that the first alarm came from Behar, where two bad years were experienced in succession. So early as the 1st February 1769 the Resident in Behar reported very great distress among the ryots, in consequence of long continued drought. It is to be gathered that there had been floods in August 1768, and "from the middle of August (of that year) there was no rain till the beginning of January, and then lasted only a few hours, and came too late for the general benefit." The Resident urged the "absolute and immediate necessity to consider the poor and suffering ryots distressed by what no human foresight could foresee or prevent." That the Amils might not exaggerate, he sent his Assistants to inspect and report, and found "that the damage is general, but more felt in some places than in others; those parts that lay near the hills have suffered most. In the low countries they have been assisted by their reservoirs of water." He proposed large abatements of the revenue, which were sanctioned.

1768 and 1769 also were bad years in Behar.

6. The following season commenced very badly. On the 28th July 1769, the Resident in Behar reported that up to that time "we have only had in some parts a few showers, and those so very trifling that but little benefit has been received from them. The grain sown sometime ago is entirely spoilt." The province, he said, was much distressed and the people with difficulty prevented flying the country. On the 1st August he repeated the same tale, adding "the effects of it begin now to be severely felt. Neither Shetab Roy* nor I can stir out, but we are stopped by multitudes of the poor pressing to make known their distress. Grain has within these few days risen to a prodigious price and continues to increase, as there is not only the greatest probability of losing the entire harvest, but a general famine to be dreaded." The grain duties were taken off, exportation prohibited, and the Golahs opened, but all, the Resident feared, would be ineffectual without rain. A few days later he reports more hopefully. Some very plentiful showers had fallen, and from the weather a further supply was hoped for, all which had changed the face of affairs. These hopes, however, proved fallacious, little more rain fell, and in the subsequent months the famine was fully established. In the Bengal Consultations of date 23rd October 1769, we find Mr. Rumbold, the late Resident in Behar, stating that the country is "distressed beyond conception from the prevailing drought, which (not having had one day's continued rain through the season) fills one with the dreadful apprehension of an approaching famine. Rice sold at 10 seers for the rupee when I left Patna, and the distress of the poor appeared daily." The price quoted was, no doubt, an extreme famine price in Behar in those days. The Council on this date resolved to import rice for the relief of the Behar stations from the eastern districts.

7. I have not found the contemporary reports of the season 1768-69 in Bengal, but that in North Bengal that season was bad, is shown by the subsequent statements of the Resident at the Durbar (at Moorshedabad), who, on 17th August 1769, reported the "alarming want of

August 1769. Drought in North Bengal.

[* Shetab Roy was Naib Dewan of Behar; *i.e.*, Naib for the Hon'ble Company as titular Dewan. The Company did not "*stand forth*" as Dewan and assume the nominal in addition to the previous real fiscal control until 1772 J. G.]

rain which has prevailed throughout all the upper parts of Bengal both the last and this season, and particularly the latter, to a degree which has not been known in the memory of the oldest man." On 26th August he adds, "there is a great reason to apprehend that in all the districts to the northward of Nuddea the crops of rice will be very short indeed. Since the season for rain began they have hardly had any, and if God does not soon bless this country with plentiful showers the most fatal consequences will ensue,—not only a reduction in the revenues, but a scene of misery and distress that is a constant attendant on famine. God, of his infinite goodness, avert the dreadful calamity."

August 1769. Scarcity in Calcutta (and Madras.)

I do not find traces of any great failure in the southern districts of Bengal in 1768-69; but either from failure in the early rains of the season 1769-70, or from the demand to supply the northern districts, rice had become very scarce in Calcutta so early as the beginning of August 1769. Madras having suffered from drought and the ravages of the enemy, the Government there had sought supplies from Calcutta. On 1st August 1769 the Bengal Council resolved to despatch two ship-loads of rice to their aid. "The scarcity of this article, however, prevailed so much at our own settlement that the Buxey represented to us it would be impossible to provide two cargoes."

Drought in September, October, November, 1769.

8. From September onwards the march of the calamity seems to have been without abatement, and we have more and more frequent mention of the state of "the country distressed beyond conception from the late prevailing drought in every part of the Province." In October no rain fell. On the 20th November 1769 the Collector-General at the Presidency made strong representations respecting "the general calamity in these provinces from the uncommon drought which has prevailed;" and with regard to the districts in his own especial charge he urged the necessity of measures for the present relief of the ryots, not only in Burdwan, but in the Calcutta lands. He saw an "alarming prospect of the province becoming desolate." He had at first discountenanced complaints, but "being thoroughly convinced by the daily flight of numbers of ryots that the calamity is real and not imaginary, motives of humanity and duty now equally urge me to lay before you the distresses of the country. In the southern quarter or lowlands of the province they have fortunately been blessed with some rain; but to the northward the drought has been so severe as to occasion a total loss of the rice crop in some places, and the greater part of it in others." The Board were "but too much convinced of the melancholy truth of the representations," and sanctioned various remissions.

Report to Court of Directors, 23rd November 1769.

9. On the 23rd November 1769 the Bengal Government formally reported to the Court of Directors the existing distress. They say:—

"It is with great concern, Gentlemen, that we are to inform you that we have a most melancholy prospect before our eyes of universal distress, for want of grain, owing to an uncommon drought that has prevailed over every part of the country, insomuch that the oldest inhabitants never remember to have known anything like it, and as to threaten a famine.

"As there is the greatest probability that this distress will increase, and a certainty that it cannot be alleviated for six months to come, we have ordered a stock of grain sufficient to serve our army during that period to be laid up in proper store-houses; and we have taken and shall pursue every means in our power to relieve the miserable situation the poor inhabitants must be involved in from this dreadful calamity; but we cannot flatter ourselves that all our endeavours will prevent very fatal results being felt, or that human means can check its baneful influence.

"The consequence of so general a calamity cannot be confined to individuals, and though they may most severely feel them, the public must suffer likewise; and we have too much reason to apprehend it will occasion a very considerable diminution in your revenue, to what amount, we cannot at present form a judgment; but we deem it our indispensable duty to give thus early information, in hopes by being prepared for such an accident you may be the better able to guard against its effects; and we would take the liberty to suggest whether a considerable diminution in your revenue from so unforeseen and unavoidable a cause may not be a just plea for a proportional abatement to be made from the demands of Government, as well as that of your being dispossessed of any part of your territorial acquisitions and revenues by any Foreign power."

10. The first requisitions for grain to meet the wants of Behar and other places were sent to the British authorities at Dacca, who, being apparently unable to procure a supply on the spot, deputed a gentleman to Backergunge to purchase grain. The Government informed the Resident in Behar of their willingness to "grant unto the ryots the utmost assistance in our power." Behar, in fact, for some time continued to be the province which presented the greatest scene of distress:—"The plough stands still and numbers of the ryots desert their homes," as the native authority put it. On the 26th December 1769 the new Resident at Patna writes:—"It is not only the apprehension of distant evils" but the extremity of immediate distress that we are required to oppose a remedy to, and each day lost in deliberation adds to the calamity. It will be some encouragement to the ryots at least to be assured that the thoughts of Government are employed for their alleviation. If we may judge of the interior of the country from the city of Patna, it must be in most deplorable circumstances indeed. From fifty to sixty people have died of absolute hunger in the streets every day for these ten days past. The Rajah informs me that there are about 8,000 beggars in the place, and if he was to attempt to assist them in a public manner the number would still increase from every village about Patna. For the relief of those near my own habitation I have taken the liberty to serve out Rs. 50 worth of rice daily at the Company's charge. The Rajah proposed to allot about two lakhs of rupees for the assistance of the poor, but I told him I could by no means give sanction to such a measure without your permission." In reply, the Government did not deal directly with this question of the two lakhs. They sanctioned the Rs. 50 per diem, which "being an expense which ought to weigh little against the obligations whereby we are bound to protect and assist the people of those provinces, meets with our entire approbation,

December 1769. Extreme distress in Patna city.

and should the distress increase we allow of your enlarging that allowance in proportion, but with all possible economy." Remissions of revenue at the discretion of the Resident were also sanctioned. The view that the calamity was due solely to natural causes under antecedent circumstances of comparative prosperity, is confirmed by the observation of the Government in these orders :—"we are well aware that a scarcity grain, not of specie, is the evil generally felt in Behar."

1770, January, February. Distress in North Bengal, especially Purneah.

11. Meantime in Northern Bengal and other districts also the evil was becoming very great, and especially in Purneah, on the confines of Bengal and Behar. Of 25th January the Government reported home that their apprehensions were confirmed, and the calamity severely felt in all the provinces. They announced remissions of revenue to the farmers, taking care that they also extend it to the ryots."

On the 4th February they again reported—

"The droughts which have so long prevailed, we are concerned to acquaint you, still continue. No part of either province has been exempt from the calamity, but Behar has more particularly and severely felt its influence. Whatever the experience of Mr. Rumbold and Shetab Roy, the advice of Mahomed Reza Cawn,* and our own judgment could suggest, has been maturely weighed and every precaution taken for the support of the collections and alleviation of the evil. Notwithstanding these our endeavours, the daily accounts from Behar represent such scenes of misery and wretchedness, such general poverty and despondency, that we cannot expect to see a revenue equal to former years. Abatements must in some measure keep pace with the necessities of the country; it shall be our care that they be not wantonly allowed or ineffectually applied.

"In Bengal we have not found yet any failure in the revenue or stated payments; but we must not flatter ourselves in a country where the labourer depends merely on the coming in of the harvest,—not on any established or accumulated property,—that he can always pay the full demands of Government, neither can we with any regard to justice or consequences, insist on it.

"We shall think ourselves happy if by relaxing the rigour of the demands for a time, we give encouragement and leave room for the industry of the poor, to exert itself in retrieving the calamities of one year during the course of more successful seasons."

February 1770. Distress in Moorshedabad.

12. In the beginning of February the resident and native authorities at Moorshedabad had arranged a plan to have rice distributed daily in the city at six places at half a seer to each person. The Government approve,—he "may be assured of our concurrence in every measure for the relief of the poor," and they "earnestly recommend his taking every step towards this purpose. Exportation was prohibited from certain districts, and fresh orders issued for the purchase of rice in the south-east and north-west; but a general restriction on grain was thought premature.

[* Shetab Roy was Naib Dewan for the Souba of Behar, Mahomed Reza Cawn for the Souba of Bengal.]

13. Early in February 1770 a little partial rain seems to have fallen too in some districts, but it was quite insufficient to do any material good, and from that time to the end of May the drought was universal. Not a drop of rain fell, and the country became daily more and more parched and distressed.

A little rain (partial and insufficient) in February 1770, but from February to May not a drop.

14. On the 16th March the Resident in Behar submitted a report with enclosures giving the result of inquiries in various districts. "They exhibited," he says, "a most affecting scene of poverty and distress, much beyond what I myself should have credited from report. The depopulation in the interior parts of the country is now more rapid than can well be imagined by any person who has not been witness to it; and such is the disposition of the people that they seem rather inclined to submit to death than extricate themselves from the misery of hunger by industry and labor."

March 1770. Misery and mortality at Patna.

As respects his own head-quarters he says:—"The miseries of the poor of this place increase in such a manner that no less than 150 have died in a day in Patna. In consequence of this and the latitude you give me I disburse on the Company's account daily 330 Somnath rupees. The officers at Dinapore by a private subscription fed a large number, and the French and Dutch gave as largely as can be expected from their small factories."

15. On 30th March the Resident at Moorshedabad continues the history as respects Bengal:—"I think it my indispensable duty to give you an insight into its present miserable situation which has been occasioned by the most extraordinary drought (ever known) for these last ten years. Extracts of letters which accompany this will paint the real misery of the inhabitants in such strong colours that little remains for me to add, only to assure you that from the strictest inquiry and from the most undeniable evidence, there does not remain a doubt that these representations present a true picture of the distress and misery existing in these provinces. The districts that have more particularly suffered by the unfavourableness of the season are Purneah, Rajmehal, Beerbhoom, and a part of Rajshahye." The measures of relief which he adopted were advances to ryots, remissions of revenue, and distributions of food. A little later he says that he had intended to proceed on tour, but was deterred for the present, being "persuaded that though my humanity may be shocked at the numberless scenes of distress that would present themselves to my view, little would remain in my power to contribute to their comfort, while God pleases to hold from them the blessing of rain, and the country remains parched and unfit for cultivation. The distress of the inhabitants does not only proceed from scarcity of provisions, but in many parts they are without water to drink." His Assistants were out in their districts and all tell the same harassing story. Mr. Stuart assures him that "the miserable condition of Beerbhoom and the inhabitants almost exceed belief." The native Amil says that "Purneah, which was once a plentiful country, retains now nothing but the name of its former abundance. Multitudes already have and continue to perish of hunger. Never was there in

March 1770. Distress in Purneah, Rajmehal, Beerbhoom, Jessore, Rungpore.

any place before so melancholy a scene. Often when I contemplate the prevailing misery my compassion and pity are excited, yet, overruled by my regard for the welfare of the Government, appearing blind to their distress and deaf to their lamentations, I neglect not the interests of the Sircar." The European Supervisor, Mr. Daniel, adds that the number of dead bodies lying about has infected the air in a fearful degree. In the higher pergunnahs "I do not believe I should in anywise exaggerate in saying that half the ryots were dead, for if I were to speak from report or what I have seen, I should judge the number to be rather more than less."

From Jessore the history of the calamity is thus told :—"The little water that before the month of Sawun 1769 was collected was soon exhausted by the ryots watering their rice grounds, and the ground then becoming quite parched the ryots held open the eye of hope towards the blessing of the Almighty during the whole of the month of Bhadon, at the expiration of which the land was become as hard and dry as a piece of rock. Things went from bad to worse till mankind are employed in bringing the leaves of the trees from the jungle for food, and they offer for sale their sons and daughters."

The whole district of Rungpore suffered very much with the exception of one pergunnah ; and from other districts the same story is repeated.

16. At this time efforts were made to obtain grain from Oude, but great difficulties were experienced, the Nawab Nazim's people gave very ineffective aid ; the prices rose, and there was the usual unwillingness to permit the exportation of food in times of alarm. One hundred boat-loads were promised at Fyzabad on Government account, but on 10th April Captain Gabriel Harper writes from thence that as yet he has only been able to despatch 15, but he is in daily expectation of the arrival of more from Byramghat. The Governor urgently addressed the Nawab Nazim, who issued orders for the collection of grain in his western districts, and sent detachments of troops to enforce his orders, but in this way it came in very slowly.

Importation from Oude obstructed.

17. In the and of April the Resident in Behar reports that the hopes of getting something from the spring harvest (much of which is there raised by irrigation from wells) have been greatly disappointed, that the price of grain continues to rise and the famine continues to increase. Owing to the difficulty of feeding the troops, he urges their removal to the Benares and Oude territories, a measure which for political reasons the Government were unable to sanction.

April 1770, Behar, outturn of spring harvest from irrigated lands a disappointment.

On 2nd May Captain Harper reports from Fyzabad that prices there have greatly risen the last few days, and the difficulty of procuring grain increases,—the Nawab does all he can, and boats are expected, but some of those already despatched have been lost.

May 1770. Dearth at Fyzabad, Allahabad, Corah.

The Officer Commanding at Allahabad, Colonel Primrose Gailliez, has been directed to send down all he can, but he is unable to comply,—he cannot get more than enough for his own garrison. "Though the inhabitants are not in such distress here as in the provinces, yet grains of all

sorts are immoderately dear, and His Majesty has absolutely refused me liberty to buy up any to send down the country lest the inhabitants of this place should suffer in consequence of it. It is true that I have been able to purchase some grain at Corah; but there is such difficulty, perpetual interruptions, and disputes in getting it down, that I fear little can be obtained from thence."

Probably, however, private enterprise did more than the Government, and Behar was certainly materially relieved by importation, for the Resident, writing on 15th May, says, "happily for us our neighbours did not share equally in this misfortune, or we should have been deprived of those supplies to which so large a part of the inhabitants of this province are indebted for their present existence." The mortality he calculates to have already reached 200,000, to which he adds the loss of cattle and the inability of those men who remain to work from the weakness of their bodies.

Plentiful rain in June 1770. Improvement thereafter.

18. Hitherto the greatest suffering had occurred in Behar and the Bengal districts north of the Ganges; but these seem to have reached their worst about this time, and probably (although the price of grain is not specifically stated) never experienced the pitch of scarcity and dearness which occurred somewhat later south of the Ganges; for in the first half of July, when things were at their worst in these latter districts, the Resident at Moorshedabad distinctly states that matters have improved in the districts to the north. Behar had no doubt been somewhat relieved by importations from the west, and the hopes of the people raised by the plentiful rain which fell in June 1770, while the north-eastern districts of Bengal being in more easy communication with those of the south-east probably benefited more by importations from thence than did those to the south-west. In the northern and north-western districts I should judge the famine to have been more analogous to those which have occurred in the North-Western Provinces, commencing earlier and terminating sooner than in the more southern districts of Bengal.

The period of distress earlier in the northern than in the southern districts of Bengal.

19. In these latter the course of the famine much more closely followed that of which we have had such bitter experience in Orissa. In the winter and spring it was certainly less than to the north. On 3rd April it is stated that the sufferings in the Calcutta and Burdwan districts are not so great as in the districts to the northwards, but still becoming very severe; and it is agreed to distribute 50 rupees worth of rice daily in Calcutta, and 25 rupees worth in Burdwan on the Company's account. It is also mentioned that some of the principal inhabitants among the natives have for some time past in this manner contributed to relieve the distress of many hundreds. In May, June, and July the want of grain in the districts south of the Ganges was terrible, and the crisis awfully severe.

Crisis in Moorshedabad, July 1770.

20. In the beginning of June we have another report from the Resident at Moorshedabad. "Up to the end of March," he says, "the ryots hoped for rain, but God was pleased to withhold that blessing till the latter end of May. The scene of misery that intervened, and still continues, shocks humanity too much to bear description. Certain it is that

in several parts the living have fed on the dead, and the number that has perished in those provinces that have suffered most is calculated to have been within these few months as 6 to 16 of the whole inhabitants."

On 18th June he says: "rice at 6 and 7 seers per rupee, and several days there have been lately when there was not a grain to be purchased." Much good was derived from a supply received from Backergunge, without which "the Company's immediate attendants even must have starved," but it was comparatively very small in quantity.

On the 12th July we have a further report from the Resident, and then things have reached their climax. He says:—

"The representations I have hitherto made from hence of the misery and distress of the inhabitants for want of grain and provisions, were faint in comparison to the miseries endured in and within 30 miles of the city. Rice only 3 seers for a rupee, other grain in proportion; and even at these exorbitant prices not nearly sufficient for the supply of half the inhabitants; so that in the city of Moorshedabad alone it is calculated that more than five hundred are starved daily; and in the villages and country adjacent the numbers said to perish exceed belief. Every endeavour of the ministers and myself has been exerted to lessen this dreadful calamity. The prospect of the approaching crop is favourable; and we have the comfort to know that the distress of the inhabitants to the northward and eastward of us is greatly relieved from what they have before suffered. In one month we may expect relief from our present distresses from the new harvest, if people survive to gather it in; but the numbers that I am sensible must perish in that interval, and those that I see dying around me, greatly affect my feelings of humanity as a man, and make me as a servant to the Company very apprehensive of the consequences that may ensue to the revenues."

21. As almost invariably happens, the long-continued droughts were succeeded by destructive floods, and about this time great damage was thus done to the low lands in the districts of Rajshahye, Jessore, Dacca, and the eastern districts, by which, as in Orissa in 1866, the evil was no doubt much aggravated. On 24th July the Council resolved that "our hopes of relief from the next crop are by the overflowing of the rivers in the eastern provinces greatly disappointed," and therefore they write to Madras to ask for supplies from thence, matters having by this time greatly improved there.

In 1770 as in other years drought is followed by flood.

22. All through August the famine in Bengal continued with unabated severity. On the 31st of that month the Government write to the Court of Directors: "If the accounts transmitted in our letter of 9th May last of the general calamity which famine had extended to almost every part of these provinces were truly alarming, how much more so must they now be when we inform you that our miseries have been daily increasing to the present period, nor do we view relief but in a distant prospect. This is an avowed truth that it will be a length of time before the effects of so horrid a famine will cease to be felt and ere the country recovers from its present depopulated state."

August 1770. Famine continues in Bengal.

23. Meantime, however, the prospects of the new crop in all the districts not greatly injured by floods were good. In September there seem to be some symptoms of abatement of the calamity, and the despatches dwell more on all that the country has suffered than in gloomy anticipations. Still there are pitiful cries for assistance from Chandernagore and Cossim Bazar which the authorities in Calcutta are little able to meet. Some imports from Chittagong are mentioned. The excessive rains of 1770 have been attended with much sickness among the depressed populations.

September 1770. Good prospects of new crop.

24. In October things are decidedly brighter; grain is much cheaper, so much so that on 22nd October we have the captain of a ship who has been induced to bring a cargo from Madras complaining that he must sell at a loss; and on 14th November we have the following conclusive testimony to the improvement in a Resolution of the Council: "The famine now having entirely ceased and there being not only a great abundance of rice but also a prospect of a most plentiful harvest, agreed that the embargo on rice be taken off and that a publication be issued to that purpose." On the 12th December it is resolved to sell off the rice which has arrived from Madras on Government account, as it is not good, and the present plentiful crop renders it unnecessary to lay up such grain. On the 14th December the Government inform the Court of Directors that the famine has entirely ceased.

October 1770. Great improvement.

December 1770. Famine reported as over.

25. In the later papers we have glimpses of the effects of the famine in particular districts, as in Orissa it was found that the non-agriculturists had suffered most. Here is a passage which reminds me of some of the evidence given during our inquiry. The Supervisor of Purneah has great difficulty in obtaining the usual supplies of chunam, "since upon inquiry I find that of near 150 mussaldars who delivered chunam in the pergunnahs bordering on Purneah, there are now only five living."

Sufferings of non-agricultural classes.

In Rungpore it is said that the greatest part of the land is entirely uncultivated owing to the great scarcity of inhabitants. Of Dinagepore the Supervisor says: "The depopulated and ruined state of the district which has ensued from the drought and famine needs no elucidation in your presence," and he claims credit in account for money disbursed in charity, which however he gradually diminished as rice grew cheaper till the end of December, when he totally abolished it. Rajshahye seems to have suffered in a peculiar degree from the floods following the drought, so much so that in November 1770 when other districts were recovering, it was supplied by importation from the northern districts and the precincts of Moorshedabad, and between drought and flood "several pergunnahs have been desolated to such a degree as scarcely to pay one part in twenty of their revenue. Grain is still at 18 seers per rupee, while at Moorshedabad it is above 30." The course of 1770 in Rajshahye is thus summarised: "I need not remind you, gentlemen, what an excessive drought prevailed in the months of February, March, April, and May, which was such as destroyed all the boorah and all the paddy which had been sown for the

Ravages of the famine in various specified districts. Rungpore, Dinagepore, Rajshahye, Moorshedabad, Beerbhoom.

other harvests. After that all the cultivation was at a stand-still till the end of May when the rains set in with great violence and flooded the lowlands just sown." In Jessore the course of affairs was very similar. The Supervisor dwells on "the great mortality last year and the additional distress that befel this by the inundation that happened in it," and "the dreadful havoc the late famine occasioned, if one may judge from the thinness of its inhabitants, for I observed many houses in different villages I passed through were entirely forsaken.

In the neighbourhood of Moorshedabad "from the calamity of the season and extraordinary famine many of the ryots are dead for want of sustenance, many houses are depopulated, and the inhabitants remaining are utterly incapable of industry."

In Beerbhoom "the bad effects of the late famine appear beyond description dreadful. Many hundreds of villages are entirely depopulated, and even in the large towns there are not a fourth part of the houses inhabited." Hooghly is represented to have "suffered in the most dreadful degree from the effects of the famine and mortality. I did not conceive that the famine would have been so dreadfully severe as it appears to have been. One half of the ryots of Sutsukya were credibly reported to have perished from the famine."

The Resident of the Durbar sums up by saying that "during the last year the provinces laboured under the most severe calamity that any country was ever afflicted with,—a continued drought which produced such a famine and mortality among the inhabitants as I believe history does not furnish us with an instance of."

Notwithstanding famine of 1770, revenue collections well sustained in 1771.

26. Notwithstanding these very unfavourable accounts, the crop was so good, and the demand for rice so sustained in consequence of the total exhaustion of stocks, that in 1771 the revenue collections were very much better than had been anticipated, and in fact did not show the deficiency which might have been expected to follow such depopulation. "Notwithstanding," say the Government of Bengal to the Court of Directors on 12th February 1771, "the severity of the late famine, and the great reduction of people thereby, some increase has been made in the settlements both of the Bengal and Behar Provinces for the present year, though in some particular parts, where the loss of inhabitants has been greatest, and in others where the succeeding crop has been destroyed by the overflowing of the rivers, we are apprehensive deficiences will be unavoidable."

The favourable anticipations for that year were justified, for after its conclusion the Government again report—"notwithstanding the loss of at least one-third of the inhabitants of the Province, and consequent decrease of the cultivation, the net collections of the year 1771 exceeded even those of 1768, as will appear from the following abstract of accounts of the Board of Revenue at Moorshedabad for the last four years:—

	Rs.	A.	P.
1768	1,52,54,856	9	4
1769, the year of dearth, which was productive of the famine in the following year ...	1,34,49,148	6	3
1770, the year of famine and mortality	1,40,06,030	7	3
1771	1,57,26,576	10	2

They add, however: "It was naturally to be expected that the diminution of the revenue should have kept an equal pace with the other consequences of so great a calamity. That it did not, was owing to its being kept up violently to its former standard," and they go on to recommend various ameliorations.

Succeeding glut of grain

27. The subsequent crops continuing to be good, another financial evil was experienced,—the too great cheapness of grain, regarding which the Government say: "It may seem rather a paradox that a circumstance of this kind should affect the revenue more materially than the famine which happened two years ago;" and they go on to account for it thus: "It appears most probable that the mortality was mostly among the workmen, manufacturers, and people employed in the rivers, who were without the same means of laying by stores of grain as the husbandmen, so that the number of consumers who suffered by this calamity was greater, in proportion, than that of the cultivators of grain." The bad effects of the cheapness of grain being especially felt in Dinagepore the Collector was directed to receive the revenue in kind, and to build golahs for its reception on the public account.

Conclusion.—Famine of 1770 similar to that of 1866 in character and intensity, but more widespread.

28. On a review of all that I have been able to gather regarding the famine of 1770, my general impression is that in Lower Bengal it was very similar in character, and in degree of intensity, to the Orissa famine of 1866, but that it prevailed over a larger area, and affected a much greater population

Extent of relief in 1770

The British authorities were early alive to the evil, and much sympathised in it, but always with an over-ruling consideration for the revenue; and although early measures of relief were adopted, and they were good of their kind, they were such as would, in these days, be thought miserably small in proportion to the magnitude of the evil. The account of the Backergunje rice received at Moorshedabad shows only Rs. 1,24,506 expended on its purchase; and it is remarked that "the first subscriptions of the Nawab and the Minister exceeded ours, and this addition to it makes the account superior." Considering also that they had fed many hundreds by private charity, it was resolved not to ask them for further contributions towards the expenditure of the Company in charity. There is no account of the total sums expended in different districts, but the notices which I have gleaned show that the relief was always on a small scale, except in Patna where the daily sum allowed was larger.

Conduct of the officials

There was some interference with freedom of trade contrary to modern economical laws, but not to a very great or very injurious extent. Indeed false notions of political economy have never taken very deep root in India It is in the despatches from England that we find fierce denunciations of those who were suspected of forestalling and regrating, and aggravating the famine by such means. The Government early took measures to prevent the use of undue influence by Europeans in the purchase of grain; and we have the same correspondence between zealous colonels anxious to collect grain for their regiments by sepoy parties, and active civilians objecting to such interference with the people, which have occurred in modern

days. Upon the whole it seems probable that the Government of Bengal were for the most part borne out in their defence of their servants against the charge of trafficking in the necessities of the people which the English public and the Court of Directors brought against them.

THE FAMINE OF 1783.

29. The next great famine was that of 1783. The disturbance of the season in that year seems to have been general, and occurring in Bengal and Behar while the memory of the disasters of 1770 was still fresh, and at a time when the sufferings of the Western countries were very great, it created much alarm; but as the result was not in Bengal so bad as had been expected, and the countries most affected were not then subject to British rule, I have not found much detail to add to the information which we already possessed. From an expression of the Governor-General, Warren Hastings, writing from Lucknow in June 1784, it would seem that the upper parts of Hindustan had been visited with extraordinary drought during the *two previous years*. Of the country about Lucknow he says: "This province, although it has suffered less than those which are situated still more to the westward, has already felt the fatal influence of the general calamity both in the loss of its population and in the diminution of its revenue. It will perhaps be sufficient to inform you that barley and nakood, which form the chief articles of the sustenance of the lower inhabitants of this part of India, sell at present at the rate of 15 seers, though in moderate seasons the average price of them is about a maund and a half for the rupee. In the same proportions wheat and all the other kinds of grain have risen in price." In all the famines of which I have information, the present Oudh Province seems to have escaped better than others, and as respects that with which I am at present dealing, although it suffered more than on any other occasion, the description of the Governor-General does not suggest such extremities as have been recounted in Bengal and Orissa. But there can be no doubt of the frightful extremities then suffered in the Punjab and Western Hindustan, and the alarming rumours of the sufferings of the provinces adjoining the then British territories were so significant, that it seems probable that some of the drier districts lower down the Gangetic valley must have suffered more than those about Lucknow.

1783.

The area of this famine the North-Western Provinces, Oudh, and the Punjab.

30. As in 1770, so on this occasion also the famine was preceded by an alarm from Madras. It seems to have been almost the normal state of Madras in those days to have been constantly in want of supplies from Bengal, but in 1782-83 the want rose to the pitch of severe famine. Early in 1782 the Collectors of the grain districts of Bengal, "which have fortunately produced very abundant crops this season," are ordered to make purchases on the Company's account for despatch to Madras; and on 27th September 1782 it is stated, "notwithstanding the liberal contributions of charity, we are informed that our united endeavours have hitherto proved inadequate to their subsistence, as hundreds are daily expiring through want." Throughout

Requisitions for Bengal by the Madras authorities, 1782, 1783.

1783 the necessities of Madras continued. I have not ascertained how far these were due to natural causes, but that they were, at any rate greatly aggravated by war, is clear "when," as the Bengal Council say, "the enemy was at their walls, and by his ravages in every part of the adjacent country had destroyed the cattle and reduced the inhabitants to the most pressing difficulty to obtain the most common necessaries of life."

Drought in Behar and Purneah, September and October 1783.

31. It was in September and October 1783 that the Bengal Government became alarmed for themselves. There was then an abnormal cessation of the rains and extreme drought. In the latter half of September all the Collectors in Behar, as well as the officer in charge of Purneah, sent very alarming reports, and though a few showers in Tirhoot induced the Collector of that district to write more hopefully in the beginning of October, his hopes were disappointed, and the latter rain crops certainly failed very generally in all that part of the country. In October 1783 the Governor-General made the vivid report of terrible famine in all the countries from beyond Lahore to the Karumnasa (the western boundary of Behar) quoted in paragraph 7, 3rd Part of our report, and the general letter to the Court of Directors of the 23rd of that month is full of the subject. Great apprehensions were felt for the Nawab Nazim's country, and the famine had been already severely felt in all the western countries towards Delhi. To the northward of Calcutta, the crops upon the ground have been scorched, and nearly destroyed. The famine "has raged with so much greater severity in its progress to Lahore that multitudes of the inhabitants of the districts beyond the Jumna are already flocking to Lucknow." It is added that these people may be induced to come down to Behar, "we have ordered encouragement to be given to them for that purpose, both from the humanity of saving them from the inevitable destruction of a famine, and the lawful desire in such cases of increasing the subjects of the Company's dominions."

The Government hoped that in Bengal "from the superabundance of the crops of last season, from those which have already been gathered in as plentifully as usual in the month of August, and from those remaining to be gathered in the eastern parts of Bengal, which are properly the rice districts, there will be an ample quantity with moderate care to prevent the dreadful effects of a famine." They very liberally and wisely "thought it necessary immediately to take off the duties on grain of every kind, and to allow a free communication of trade from place to place in this article." But at the same time an embargo was laid on exportation by sea, except to the extent of the contracts already made for the supply of Madras, since it was ascertained that tonnage was engaged to export no less than 1,100,000 maunds, and such an export would, in the opinion of the Government, have been ruinous to the country.

All grain trade subjected to a "Committee of Grain."

32. Feeling acutely the remembrance of the former famine, and influenced no doubt by the character of the instructions received from Home on that occasion, the Government of 1783 exercised a much more active interference with the grain trade than in 1770. A "Committee

of Grain" was at once appointed, with full powers to regulate all dealings in the article, and to superintend the price, distribution, and sale of rice throughout all the provinces, the members of the Committee being put "under the most sacred oath to derive no advantage directly or indirectly from their trusts." The permission to export beyond the provinces seems to have been soon revoked. The Committee of Grain were authorised to establish granaries at Patna and other places. Soon after, on 30th November, the Government say that "the reports respecting the December crops are favourable from many parts of Bengal, but particularly from the eastwards of the Ganges; the north division of the province of Behar is likely to produce a sufficiency of grain for the consumption of its own inhabitants. We hope therefore that by the timely interposition of our authority we have in a great degree prevented the fatal effects of a scarcity. Indeed, the first effects of the alarm have totally subsided, and the markets are everywhere plentifully supplied at rates which the people can easily afford, and this was brought to pass instantaneously on the first regulations which were issued for that purpose." Again they say "on the one hand, admitting the scarcity to have been artificial, it was founded on the certainty of such a calamity existing in the western districts and the effects of an uncommon and universal drought throughout the whole. And the shocking experience of a famine in 1770 was still fresh in the memories of most people. If under such appearances we had allowed the exportation of grain to the Coast to be continued, and a famine had really ensued, our forbearance would have been alleged as contributing to the cause of it, and we should have received the general execrations of the famished multitude, while we remained the passive spectators of a scene of distress and depopulation all around us, without being able to mitigate its rigor at that late period. *For Bengal, in the event of a general failure of its crops, has no other resort for grain but to its former stores.*"

33. These arguments were principally used to justify the Government against the anticipated complaints of the Madras Government; but the difficulty at Madras was soon after happily remedied by the re-establishment of peace and good crops, insomuch that by the middle of 1784 the price there, "even in the greatest time of plenty, is seldom so low as it has been since our last despatches to you." Yet there were constantly recurring demands from some quarter, and at this time we find that Bombay and Tellicherry are in want, and it had been necessary to send round shipments to those settlements.

1784. Return of plenty in Madras.

34. The measures of paternal interference adopted in the autumn of 1783, under the supervision of the Committee of Grain, and for the success of which the Government took so much credit, were of a stringent character. The Collectors were directed "that you do immediately make a progress into the districts under your charge, and by a careful and accurate inquiry ascertain the quantity of grain now in deposit, and by local observation form the best possible judgment of the state of the crops now on the ground, and of the comparative produce of the present with that of past years." It was proclaimed by beat of drum that in case any holder of grain should "conceal it or refuse to

Autumn of 1783. Bengal. Stringent regulations on grain dealers.

bring it to market and sell it at a reasonable price, he will not only be punished himself in the most exemplary manner, but his grain will be seized and distributed among the poor;" and "in any instance where a sudden or extraordinary rise of price is required, you will summon the persons to appear before you, and assign their reasons for imposing such increase, and if they appear unsatisfactory, and with a view to extort a personal advantage, you will prevent its having effect by forcing a sale of the grain at a rate which may be deemed reasonable and fair by a number of the principal inhabitants, whom you will call upon for the purpose of fixing a rate of price," while the offenders were to be held in confinement, and a report made on their conduct. All this was recommended to the serious and particular attention of the officials, "more especially as the dominions of the Vizier are threatened with a famine, and will require every aid which the Company's districts can afford consistently with their own safety."

Losses in Behar and in various Bengal districts.

35. In December 1783 Mr. Shore was in Behar making a special report on that province. From his statements it is clear that the province had suffered very serious injury, most of the later rain crops being, he says, lost, and the prospects of the winter crops very unfavourable. From other notices it also appears that great injury was sustained in Purneah, Beerbhoom, and parts of Rajshahye, but there was an especially abundant crop in Rungpore, and a good one in Sylhet and other eastern districts. The Behar merchants derived considerable supplies from the Chota Nagpore country.

Perpetual granaries resolved on.

36. The Bengal Council were somewhat too sanguine in assuming the entire removal of alarm before the end of 1783. In the beginning of 1784 there was evidently still a good deal of pressure and alarm, and in February the Government, feeling themselves unable with safety to send assistance to Madras, sent to Batavia for rice from that Settlement. Still, they say on 9th February 1784 that the appointment of a Committee of Grain with very extensive powers, and their exertions, have had so good an effect, that although the scarcity has not been entirely removed, the alarm of the natives has in a great measure subsided. The Governor-General recommended, and the Council strongly supported, that buildings of solid masonry should be constructed to serve the purpose of perpetual granaries to the two provinces. It is stated that some grain which had been long kept in store in golahs in Fort William, as an experiment, was found when the golahs were opened to be in perfect condition, and sold well. And on a plan of the Chief Engineer it was resolved at once to erect a circular building at Patna for the purposes mentioned in the Governor-General's minute.

1784 opens favourably in the Upper Provinces;

37. On the 28th February 1784 it is confidently reported that "the distresses of these and the neighbouring provinces have much abated." The season 1784 proved early and favourable, and it may be presumed that the letter of the Governor-General from Lucknow in June of that year (already quoted) was near the closing scene of the distress in the Upper Provinces. By August all apprehensions had been removed from the minds of the Government, and before the end of the year a

very abundant harvest had enabled them to take off the embargo on the exportation of grain. They conclude: "We think no caution can be too great when the lives of millions are concerned, as in the present case."

38. The general alarm was thus removed, and general plenty secured, but at this time there was terrible distress in some of those very eastern districts which had produced abundantly in the general dearth of 1783. As usual the long drought was succeeded by great floods in 1784, and on 1st December of that year the Government report that the provinces of Tipperah, Sylhet, and Dacca have suffered great distresses from inundations. They refer to the Collector of Sylhet's letter, quoted in the 20th paragraph of the 3rd part of our report. I have not found further contemporaneous details regarding this calamity, but that it was very wide-spreading and severe is shown by subsequent expressions in the papers regarding the floods of 1787, in which for comparison repeated reference is made to the horrors of 1784.

but in Eastern Bengal ends with inundation (the usual sequel of drought).

39. The year 1787 was one of most extraordinary and persistent disturbance of a character the opposite of that of the years of great drought. From the beginning to the end of the season there was one continued succession of excessive rains, floods, and storms.

1787, a year of flood and storms.

THE FLOODS OF 1787.

40. From several of the reports of the Collectors it appears that the rains commenced abnormally early and continued for months almost without cessation. In some of the districts of Bengal it stated that from the latter part of March to the latter half of July they had continued with such violence as almost to render cultivation impossible; and in Behar, from the beginning of June to the same period, a similar state of things prevailed. By that time terrible damage had been done in the eastern districts, the inhabitants driven from their homes, the cattle drowned, and general alarm and scarcity prevailing. There was a break in the rains and some fine weather about the end of July, but that was succeeded by fresh violent inundations; and again early in September the waters were out as widely as ever, so that, as the Collector of Sylhet pathetically remarks, "after three separate attempts to sow their lands the ryots again find all their hopes vanished, and now the season is gone." From Jessore, Nuddea, and Central Bengal, there are also grievous complaints of frightful inundations in the middle of September. In the end of September there were renewed accounts of great storms and inundations in Behar, and about the 30th September and 1st October a tremendous storm of rain and wind swept over all the Western districts of Bengal, doing immense damage. According to the Collector of Midnapore, "vast torrents rushed down from the westward, and on the ensuing morning I had the melancholy prospect of seeing an ocean passing with great rapidity, carrying down houses and cattle, men, women, and children." The Collector of Beerbhoom at first laconically reports:— "All is not lost, but I dread to inquire how much is;" and there are

District notices.

other accounts similar to that given from Midnapore. The town of Burdwan was "totally destroyed, not a vestige of a mud-house remaining, and even those built of brick are many of them fallen."

Cyclone of 2nd November 1787.

41. The crisis and conclusion of all this series of calamities occurred on 2nd November, when a cyclone of quite unexampled extent seems to have swept across almost the whole of Bengal. We find similar complaints from districts so widely separated as Midnapore and Sylhet. In Midnapore the storm raged on the 1st and 2nd November. It reached Sylhet on the morning of the 2nd, first blowing from north-east with great violence, and heavy rain till 3 in the afternoon, when it changed to east, and rising to a furious hurricane, carried everything before it. By this disaster the late crops, which after all previous disasters were first getting into ear, were in great measure destroyed over large tracts of country.

Distress in isolated places owing to the floods.

42. Great as these calamities were, and reaching to the very utmost of all that seems possible from flood, they did not result in general famine throughout the country. As remarked by the Government, the inundations affected some parts more than others. They speak of the miseries suffered in *several* districts. Although the complaints from Behar were very loud, the general result there cannot have been altogether bad, since it was possible to export grain for the relief of Dacca from parts of that province where the crops had been abundant. In Nuddea and the neighbouring districts the early rice had been for the most part well harvested before the great inundations reached that part of the country. But in some of the eastern districts there was severe famine. In Rungpore large numbers of starving people flocked into the station and were fed by the Collector. Coarse rice sold at 23, and in some places at 18 seers per rupee,—prices then considered famine rates in that part of the country. In Sylhet, after the final storm of November 2nd, the Collector reports that there were in the station upwards of 6,000 people who were daily supplied with rice, and of these many had died near his house. The mortality in Rungpore, he adds, must have been great indeed. In the hill country bordering on Sylhet Lieutenant Davidson came on great scenes of distress, and it was found necessary to send 20,000 maunds of rice for the support of these people driven to plunder by hunger. The Collector of Dacca speaks of great mortality caused by the scarcity of grain. The general market was so considerably affected by the demand for the supply of the distressed districts, that on 28th January 1788 the Government, "taking into consideration the dearness of grain at Moorshedabad, Dacca, and some other parts of the country, not excepting the town of Calcutta, owing to the inundations which have affected the crops and the violent storms at the beginning of November," thought it necessary again to lay an embargo on the exportation of grain; and, as before proclaimed, that any persons guilty of withholding their grain from the public market should be punished by the confiscation of the grain, and by such other penalties as the occasion may require. By June the distresses at Dacca and other parts of the country had been much relieved, there were favourable prospects for the next season, and the effect on the

revenue of the calamities of the past year had proved less than was apprehended.

FAMINES OF 1770, 1783, AND 1866, COMPARED.

43. On the whole, the result of a nearer view of the great famines of the last century is somewhat to detract from our conception of their enormity as calamities of a totally different scale and character from those of modern days. The famines of 1770 and 1783 were undoubtedly more wide-spreading than any of those this century; but it has been seen that the western limit of that of 1770 can be fixed with some accuracy as not extending far beyond the frontier of Behar, while in 1783 severe famine did not extend eastwards very far beyond the same line. The experience of 1770 proves, I think sufficiently, that Bengal Proper is unfortunately liable to the same calamity as other parts of India; and, taking together 1770 and 1866, I think I may say that the inference to be drawn is, that in countries which depend almost exclusively for the food of the people on the single staple of rice, famine, when it does come, is more severely felt than in countries where the staples and the seasons of production are more varied, and where a considerable quantity of grain is always raised by an unfailing artificial irrigation. Both in Lower Bengal in 1770, and in Orissa in 1866, the scarcity of food was much greater, and prices rose very much higher than on any other occasion in any of the provinces of which I have exact information. Rice on both occasions was as high as 3 seers per rupee in regular and important markets, and in many places was not to be had for money, or was sold at still higher prices; whereas in the other famines of which we have any details, the highest famine prices in Oude, the North-West Provinces, and the Madras territories, have ranged from 7 or 8 to 15 seers per rupee, and food has always been procurable for money. Only in the countries still further to the west may greater extremities have been suffered in 1783, but of the prices there prevailing or other details, I have no precise information.

The famines of last century less enormous than is usually conceived.

Precariousness of rice as principal food staple.

CONCLUSIONS.

44. From all that I have been able to learn regarding the history of the various famines, I would deduce the following conclusions:—

1.—That the general climatic system of India is subject to extraordinary disturbances in particular years by which extreme failures of the food-supply are caused and will be caused.

2.—But that owing to the varieties of soil, products, seasons, and habits, no such disturbance of which we have any accurate information has produced simultaneous extreme failure of food in all, or the greater portion of the various provinces of the empire; that on the contrary, for famine purposes, the country may be roughly divided into zones, in regard to which it may be hoped that failure will not be wholly simultaneous. In the great plains of the Ganges and

Upper Indus the zones may be somewhat as follows:—

Eastern Bengal.
Middle and Western Bengal and Behar,
The North-West Provinces and Oude,
The Delhi country and the Punjab,

or possibly—The lower portions of the North-West Provinces and Oude.
The upper portions of the North-West Provinces and the Delhi country.
The Punjab.

It may also well be that the lower portions of the North-West Provinces and Behar might be involved in a common failure.

3.—That looking to the fatal effects of a failure of the rice crop in the countries of the lower Ganges which are not supplied by artificial irrigation, and the known frightful results of famine in the Punjab in 1783, efforts should be made to supply irrigation to those countries as far as is compatible with financial necessities.

4.—And that, above all, the means of inter-communication should be placed on such a footing that they may really be efficient to supply the millions of one province from the abundance of others, in case of future famine.

45. It will doubtless always be remembered that to transport food sufficient for the supply of great masses of population we shall require means of carriage far beyond the requirements of any ordinary trade. The line of the Oudh and Rohilcund Railway, which has now been sanctioned, communicating with the more navigable waters of the Ganges, will, in conjunction with the East Indian Railway, afford a double line of communication between the Upper and Lower Gangetic countries; and by the time that both lines are double, and that their traffic arrangements are rendered thoroughly efficient, it may be hoped that these lines, aided by water carriage, will suffice to render available the resources of one zone of the country to the necessities of another. I will only venture to express again a hope that this end may be attained before another famine overtakes us.

46. I would further urge the extreme desirableness of pushing on the means of communication between the Punjab and the Gangetic country, the conditions of which are so dissimilar that it has usually happened that want in one has been accompanied by great abundance in the other. The completion of the line of railway in course of construction will, if the line be doubled, supply one good communication, but the Delhi and East Indian lines run for some hundreds of miles to the south-east of the Punjab territory, through the driest part of the Gangetic countries, and those which afford the least contrast to the Punjab. It would seem still more important for the interchange of commodities to put the dry Punjab in communication with the moist countries of Rohilcund and Northern Oudh. I would suggest for consideration that this might be effected by filling in a missing link of about seventy miles from Meerut to Moradabad, to unite the Punjab line with the Oudh and Rohilcund line as now projected. I cannot but think that this line, on which the normal every-day traffic in salt and sugar alone would be

enormous, is more important to the interests of the people than what I may call the pleasure-line from Mooradabad to Nynee Tal, which is part of the present scheme. All Rohilcund and Northern Oudh are supplied with salt from Delhi, and there is an immense and constant return trade in sugar, besides the varied course of trade in many other articles. In case the Western Jumna Canal is remodelled (as has long been recommended) and a canal is made from the Upper Sutlej, water communication between the Punjab and Gangetic countries might also be established.

GEORGE CAMPBELL.

List of Records on Indian Famines, some of which may be needed for reference in compiling the retrospects of the Relief and other Measures for 1873-74.

LAST CENTURY.

1. *Extracts from the Records of the India Office, London, relating to FAMINES in India in the LAST CENTURY,* 1769-1788: compiled by GEO. CAMPBELL.—Calcutta, pp. 198, folio.

2. Memoir by Mr. [Sir] Geo. Campbell, summarising these [reprinted in the present volume, see below under ORISSA.]

3. HUNTER'S Annals of Rural Bengal, Vol. I, and subsequent volumes.

4. (1) Colonel Baird Smith, (2) the Orissa Enquiry Commissioners, (3) Mr. Girdlestone, (4) Mr. Gordon Forbes, and (5) Mr. Dalyell, have also treated of the famines of the last and preceding centuries. Their memoirs are indexed below.

NORTH-WEST PROVINCES AND PUNJAB, 1861, &c.

1. COLONEL BAIRD SMITH'S three reports on the Famines of 1860-61 in the N.-W. PROVINCES (the Parliamentary Blue-book, pp. 109, folio, is the best edition).

2. Mr. [Sir] J. STRACHEY'S *Note on the measures adopted for the relief of the poor in Moradabad during* 1871, pp. 14, folio.

(Selections from Records of Government, N.-W. Provinces, Part XXXVI, 1862).

[Almost the whole of this Note has been reprinted in the present volume in the different sections.]

3. Report on Past Famines in the NORTH-WESTERN PROVINCES, by C. E. R. GIRDLESTONE.—Allahabad, 1868, folio, pp. 110:—XLIII.—Contents:—Introduction; (1) Famines previous to 1873; (2) Famine of 1783; (3) Famine of 1803-4; (4) Minor Famines between 1813-1837; (5) Famine of 1837-38; (6) Famine of 1860-61; (7) Events in 1865 and 1867; (8) The Lessons of Past Famines; (9) Statistical Tables, &c.

PUNJAB, 1861.—There is a small compilation of Relief Reports in the Punjab, chiefly by the Rev. C. Sloggett, Lahore, 1861, pp. 84, demy 8vo.

THE ORISSA FAMINE, 1866.

The standard work is of course the REPORT OF THE COMMISSIONERS APPOINTED TO ENQUIRE INTO THE FAMINE IN BENGAL AND ORISSA, 1866,—Calcutta, 2 vols. folio, 1867.—Vol. I, pp. 361, ccxxiv. Vol. II, pp. 647.

The edition laid before Parliament as a Blue-book (1867), parts I and II, pp. 391 and 221, is printed in handier shape, and contains a number of additional and important State papers. On the other hand there are portions of the district correspondence contained in the Calcutta second volume, which have not been reprinted in either of the London volumes and *vice versâ*. The Calcutta edition has been widely distributed among official private libraries throughout Bengal. In order to suit both editions references had better be made according to Parts (I, II, III) and paragraphs, and not merely by pages.

II. FURTHER REPORT ON THE FAMINE IN ORISSA IN 1866, WITH APPENDICES (by Mr. George Campbell). Nagpore, Chief Commissioner's Press, 1867, 47 pp. folio. Contents.—(1.) *Report, Part IV.—Changes in the executive machinery of Bengal suggested by the experience of the famine.* (2). *The famines which affected Bengal in the last century.* (3). *Note on the question of permanent settlements.* The second section of the above has been reprinted in the present volume. The first section was reprinted in a Parliamentary Blue-book, 148 pages folio, "Administrative changes in Bengal," April and May 1868, together with minutes on the subject by Sir Henry Maine, Sir Frederick Halliday, Sir Stafford Northcote, and others.

III. Other State papers arising out of the Orissa Famine, such as the compilation on the proposal for a localised poor rate, will be noticed further on.

IV. But these volumes carry the history only down to the end of 1866. Relief measures had to be carried on for more than a year after that, and grain continued to be imported by Government on a very large scale throughout the first-half of 1867. During 1867 there were extensive and minute statistical enquiries as to the mortality, also suspensions of the land tax were granted to a very large amount, and very large sums were expended on special relief works. As the information about these operations is much scattered, and reference may be needed to them in the retrospect of 1873-74, it will be convenient to enumerate all the materials.

RELIEF.—On the Relief Administrations in Orissa during 1867, the chief authority is REPORT OF THE OPERATIONS OF THE CENTRAL EXECUTIVE COMMITTEE OF THE ORISSA FAMINE AND ORPHAN RELIEF FUND DURING 1867-68. Printed Calcutta, 1869, small folio, pp. cciii., 250.

This volume seems to have been printed in the absence of the Relief Committee's Secretary, and has been indifferently edited; has no table of contents, and is encumbered with 200 pages of mostly unnecessary letter-press at the beginning.

Putting aside these, the serviceable portions are as follow:—

(1.) *Summary by Mr. Hobhouse*, the Chairman of the Central Committee in Calcutta, pp. i—xxxi.

(2.) *Report by Mr. Molony*, Relief Commissioner in Orissa, with tabular statements for the Division, pp. 1—27.

(3.) *Report for Cuttack District by Mr. Kirkwood, C.S.*, Relief Manager,—Part I, Retrospect of the operations in Cuttack during 1866-67, pp 28-65. (A table of contents for this part, which has been mistitled and misplaced in printing, will be found at page 63). Part II, Relief Programmes for an Indian District, pp. 65-168. (A table of contents for this part, which has also been mistitled, will be found at page 113).

(4.) *Report for the Bhudruk Sub-district, Balasore, by Mr. Rampini, C.S.*, Relief Manager, pp. 159-169.

(5.) *Report for Pooree district by Mr. Toynbee, C.S.*, Relief Manager, pp. 171-179.

(6.) Tabular Statements for each of the three districts. (The whole compiled in Mr. Molony's report.)

Copious extracts have been reprinted in the present volume.

MORTALITY BY FAMINE.—The reports noticed above show only the estimated mortality. But the actual mortality became the subject of careful and extensive enquiry during 1867. The exact statistics will be found in the Board's 1801M of the 8th November 1867, to Government of Bengal, with the Commissioner's and the Collectors' reports, a set of important papers containing much incidental information.

FINANCE.—In another part of this volume I have reprinted an estimate by Mr. Westland of the cash expenditure exclusive of public works* in which the famine stood Government throughout all Bengal and Orissa. It shows the net disbursements as rendered to or by the Accountant-General's office, but does not distribute the cash expenditure under heads of account, such as transport, establishment, and the like. The expenditure was incurred in different departments; was spread over two or three years, during which, in certain departments the classification had to be altered in the course of the operations. Owing to these circumstances there would be some difficulty in classifying the whole of the expenditure under one uniform set of heads. The following are the papers that would need to be collated for the information which is available.

1. *Relief and Importation Operations during* 1866 (calendar year); also—*Importation Operations During* 1867 (calendar year)—Revenue Board to Government of Bengal, Revenue Department, No. 1351 of the 9th May 1868, and connected correspondence.

2.—*Relief and Importation Operations during* 1866 (calendar year); also—*Importation Operations during* 1867 (calendar year), Revenue Board to Government of Bengal, Revenue Department No. 1351 of the 29th May 1868:—Memorandum by Accountant-General, October 1868, for official years 1865-66, 1866-67:—Government to Board No. 3358 of the 23rd October 1868:—Memorandum (MSS) at Board in Orissa importation bundle, 14th December 1872. It will be noted that the stock accounts of 1868 end with a balance on hand. This was subsequently sold by auction. The sale proceeds of this, as well as of the stock returned by the Relief Department, would probably clear up part of the discrepancy noted by the Accountant-General. These papers mostly supersede the tabular information for 1866 rendered by the Orissa Enquiry Commissioners at pp. 631-647 of Vol. II (Calcutta edition).

3. The relief finance of 1867 and 1868 will be ascertained from the Central Committee's Report (cited above) by collating the following pages xxv, clix, and 25, the last the most important. (These statements are reprinted in the present volume under STATISTICS with some explanatory words inserted in brackets). But in collating these accounts note that the remittances charged off in the statement, page clix, reappear in the statement at page 25, and make the necessary adjustment accordingly.

4. *Expenditure on Public Works in Orissa during* 1866, 1867, 1868, *incurred solely or mainly on account of the Famine.* Statistical information in special reference to the famine would have to be compiled from the Bengal Annual Administration Reports. The Superintending

* According to Mr. Westland's estimate the expenditure and loss of revenue amounted to about £1,538,200. The expenditure on Public Works in Orissa during 1867 was estimated by Mr. Molony, Famine Commissioner at (in sterling say) £153,714.—J. G.

Engineer's printed quarterly reports would show rates and outturn. Any further information could be obtained in the Controller's Office. Probably the forthcoming volume of the Financial Department, part IV of the "Finance and Revenue Accounts," will yield useful details. With regard to the irrigation expenditure if shown in aggregate, sufficient deduction must be made on account of the Midnapore works as being outside of Orissa.

5. *Suspension and Remission of Land Tax in Orissa.*—The Board's Land Revenue Reports for the several years will give the actual amounts. There has been a correspondence upon the question how far these remissions reached the ryots. Enquiries on this subject have lately been renewed in Orissa.

6. In connection with the last and with preceding subjects it would be desirable to ascertain how far *other branches of revenue* fell off during or immediately after the famine. It would suffice to collate the returns of collections in each Orissa district for the years before, during, and subsequent to the famine in—(1) *salt*, (2) *excise*, and (3) *stamps*. The Board's annual reports on salt and excise revenue would give the necessary statistics regarding these branches. But with regard to the figures of stamp revenue, it would be necessary further to consider (*a*) the large increase in registration business owing to the extensive alienations or mortgages of property, and (*b*) the introduction of a new stamp law in 1867.

7. Closely connected with the yield of the *Salt* duty in Orissa from 1865 to 1868 is the counterpart of the question, namely, *the decline in the local manufacture*, especially on the Chilka, owing to (1) the displacement of country salt by Liverpool salt in Bengal; (2) the withdrawal of Government from manufacture; (3) the comparative failure of private enterprise to recover the lost ground; (4) the inequality of salt duty in Madras and the Central Provinces as compared with Orissa, thus placing private manufacture in Orissa at a disadvantage with Government manufacture across the boundary in Ganjam. These subjects are now under the consideration of the Government of India. The papers on these points will throw light on the depressed condition of the population round the Chilka, who suffered heavily in 1866, and some of whom had to be relieved again in 1872.

8. Considerable information is available about *Orissa trade* before, during, and after the famine. The returns of exports and imports, will be found in the annual reports of the Calcutta Collector of Customs for the Orissa outports—(*a*) foreign trade, (*b*) coasting trade. The broad-shaped annual blue-book of the Financial Department "Trade and Navigation Returns" does not give detail enough for this purpose, except for the first year or two of the series. It is true that there is some Orissa business which will not appear in these, namely, the export from South Pooree by land and by the Chilka through Ganjam, and from North Balasore by land through Midnapore. But the through traffic from beyond Orissa which comes down the Mahanuddy, the Byturnee, &c., and also by land, may be considered a sufficient set off for this.

9. The statistical returns completed in 1873 for the Board's XLIB. would be found serviceable on this head. (The statistics of the first publication XLIB. (folio) are too vague.) Also some of the tabular statements in the Inundation or Embankment Committee's Report, 4to, 1868.

The Famine or Scarcity of 1866 in South-Western Bengal.

The Orissa Enquiry Commissioners have given full information on this head. Some additional accounts of the crops throughout Bengal, generally, will be found in a Bengal Secretariat volume of December 1873, "Bengal; the crops of 1865-66 for comparison with those of 1873-74 (8vo., pp. 175)."

THE BEHAR FAMINE, 1866.

Mr. Cockerell's report contains full information. The Calcutta edition (Bengal Secretariat) is quite out of print but the reprint on the Parliamentary Blue-book, 1867, is readily procurable. The latter, nearly identical in paging, is handier to use, and contains some additional documents. The statistics of the famine affairs are summarised in paragraphs 150-151 of Mr. Cockerell's general remarks.

The mortality statistics furnished by the police to Mr. Cockerell were contested by the local officers. (See especially Mr. Alonzo Money's and the Revenue Board's reviews, which unfortunately reached the Government too late to be included with the Behar report. They will be found at the Board and Bengal Secretariat.)

A good deal of Mr. Cockerell's report has been reprinted in the Bengal Secretariat volume above cited on the crops of 1865-66.

THE FAMINE OF 1869 IN NORTHERN INDIA.

North-West Provinces, 1868-69-70, *Mr. Henvey's Report* (Allahabad, 1871, folio, pp. XII, 135, LXVII) is the most complete of all the famine memoirs which have been written. There is also a printed report of the Allahabad Central Committee (folio Allahadad 1870, pp. 36-55A.)

Punjab, 1868-69, *Mr. Lepel Griffin's Report*, (Lahore 1870, *pp.* 54, 4*to.*) The figures of gratuitous relief and of partly gratuitous employment given at page 51 must be recast and divided, as far as possible, by the number of days in question in order to admit of comparison with other provinces. The finance of the Punjab famine can be compiled approximately from materials given by Mr. Griffin (see especially pp. 48, 41, 51, 52, 14) and from the Punjab Administration Reports, but not so completely as in Colonel Baird Smith's, Mr. Henvey's, Mr. Girdlestone's, and Mr. Dalyell's memoirs.

Rajpootana, 1868-69-70.—Colonel Brooke's review of the subjects, pp. 53, folio, was printed at the Foreign Office. A short synopsis of it by the Under-Secretary, Foreign Department, will be found in the *Gazette of India*, Supplement, for 25th February 1871.

Other and valuable information will be found in the Administration Reports of the Rajpootana Agency (8vo.) for 1868-69 and 1869-70. See especially Colonel Brooke's report for Marwar. Mr. Henvey has reviewed so much of the Rajpootana famine as concerned Ajmere.

Central Provinces, 1868-69.—The Chief Commissioner's (Mr. Morris) Administration Reports for 1868-69, 1869-70. In the latter report Mr. Morris speaks of a separate memoir which he hoped to compile, but I learn from the Nagpur Secretariat that this was not accomplished. Colonel Keatinge, Officiating Chief Commissioner of the Central Pro-

vinces, in his Administration Report published in 1872, has noticed the influence of the 1869 famine on the privileged ryotwari tenures of certain districts.

MADRAS.

There are two very complete memoirs written in 1866 and 1867 by the Hon'ble R. A. Dalyell, C.S., then Secretary to the Revenue Board and also Honorary Secretary to the Bengal Relief Committee. It is to be regretted that only a few copies of these were printed.

Memorandum on the Madras Famine of 1866. (Madras, 1867, small 8vo., pp. 164). It has a full table of Contents under each of these heads:—*Part I, Historical; Part II, The condition of the people in* 1865; *Part III, the famine of* 1866; *Part IV, The prevention of famines, and the duties of an Indian Government.*

2. *A Collection of papers on the several Scarcities in Madras previous to* 1866 (Madras, 4to., about 250 pp). Contents, a summary by Mr. Dalyell, followed by the original documents, the earliest being of 1733. The chief papers are by Sir Thomas Monro (1807) and by Mr. Maltby (1854), from which latter I have made some extracts in this volume, also those on the great famine of Guntoor, 1833.

4. *The Parliamentary Blue-book on the Madras Famine,* 1867, is of a desultory character. The important papers are Mr. Ellis's minutes Lord Napier's Ganjam Minute, pp. 44-48, and Mr. Gordon Forbes's Review of the Ganjam famine, 250-269; the latter very full.

5. *Ganjam and Vizagapatam,* 1872.—Relief measures had to be renewed within six years—a circumstance which gives some interest to the proceedings. They are indexed in the Madras Secretariat as file of Mr. Thornhill's proceedings in Ganjam and Vizagapatam, 1872.

6. Mr. Carmichael's Manual on Ganjam would probably render additional information.

BOMBAY THE SCARCITY IN KHANDESH, 1872.

SOME GENERAL SUBJECTS CONNECTED WITH FAMINES AND SCARCITIES.

I. Rainfall and weather.

Mr. Blanford's recent memoir on Indian and especially Bengal Meteorology, a small quarto volume, is the most important document on this head. Also his recent digests of the statistical information about the rainfall in Bengal.

II. History of Prices and Wages.

All the famine and scarcity reports deal with **Prices and Wages.** Quite lately fuller information, continuous and extensive, for the whole of the Indian districts over a series of years has been made available in the compilations made by the Government of India, 1872 and 1873.

III. Comparative Pressure from Scarcity on the several classes of society (a)—at the same period; (b) at different periods.

Besides the authorities cited or indicated in this volume, in the extracts devoted to these subjects, there is an important volume of the Foreign Department which has been reprinted and published in convenient form as a Parliamentary Blue-book in session 1867-68 on "Systems of Administration." It consists of the replies to a circular of Lord Lawrence issued by Mr. Under-Secretary Wyllie in reference to some remarks by the Marquis of Salisbury (then Lord Cranborne) in the Mysore Debate about the Orissa Famine and other subjects. Among the notes of special interest on the question of comparative pressure and ease, are those by Mr. Davies, Sir Richard Temple, Mr. Austin Roberts, &c.

IV. Census Reports.

The volumes of the recent census have given new opportunities for judging of the condition of the population. The results of these census, together with the theories broached by Colonel Haig and others about epidemics originating in under-feeding and over-population, have given a new importance to the subject. Among the volumes of importance may be noticed—

1. Mr. Williams, on the Census of Oudh.
2. Mr. Plowden, on the Census of the North-Western Provinces—the earlier census of 1865 and the later one of 1872.
3. Mr. Beverley, on the Census of Bengal.

There are also census reports for the other territories, but I am unable to give the references to them. In reviewing the experience of 1873-74 it might be well to examine some of them and to ascertain from these and other sources, as far as possible, whether and how far the various populations in the different parts of India are severally on the increase or decrease.

V. Proposed Famine Cess.

Correspondence regarding the proposal for forming by a system of local taxation the funds required for relief purposes on occasions of famine. (Volume LXXXVIII, Selections, Records of India, Home Department, 1872, 8vo., 253 pages.) The Orissa Enquiry Commissioners had mooted the subject, and this volume contains the opinions given by various officers throughout India.

VI. Epidemic Fever and other modes of Zymotic Disease in India.

It would be well to study the papers on a view put forward by Colonel Haig, Dr. Saunders, and some others, that the Burdwan epidemic is mainly due to under-feeding. (Enquiries are being made in the Burdwan Division regarding the whole subject.)

Dr. Lyons, in a volume "*Relapsing or Famine Fever*" (*H. King & Co., London,* 1872), has maintained this view in regard to all the continued fevers of India.

In the present volume I have reprinted everything that seemed to throw any light on the question. Apart from these extracts, on which readers can form their own opinions, the rest of the evidence, negative or positive or fragmentary, seems to me not to support either Colonel Haig's view as to the Burdwan epidemic, or Dr. Lyon's view as to the etiology of Indian fevers generally. A remarkable extent of concomitance has certainly been proved, but the concomitance is not I think universal nor is the degree of underfeeding found to be a measure of the degree of fever.

I.—*Area and Population of the several* PROVINCES *of Bengal.*

[CENSUS 1872.]

PROVINCES.	Area in square miles.	Total population.	Average number of persons to the square mile.	Proportion per cent. of the area of the several provinces.	Proportion per cent. of the population in the several provinces.
The entire Territory under the Lieutenant-Governor of Bengal	**248,231**	**66,856,859**	**269**	**100**	**100**
Bengal	94,539	36,769,735	389	38·08	55·00
Behar	42,417	19,736,101	465	17·09	29·52
Orissa	23,901	4,317,999	181	9 63	6·46
Chota Nagpore	43,901	3,825,571	87	17 69	5·72
Assam	43,473	2,207,453	51	17·51	3·30

II.—*Area and Population of the several Commissioners'* DIVISIONS *in Bengal.*

DIVISIONS.	Area in square miles.	Total population.	Average number of persons to the square mile.	Proportion per cent. of the area of the several divisions.	Proportion per cent. of the population in the several divisions.
The entire Territory under the Lieutenant-Governor of Bengal.	**248,231**	**66,856,859**	**269**	**100**	**100**
Burdwan	12,719	7,286,957	573	5·12	10·90
Presidency	15,216	6,545,464	430	6·13	9·79
Rajshahye	17,694	8,893,738	503	7·13	13·30
Cooch Behar	13,270	1,570,703	118	5·35	2·35
Dacca	26 004	9,517,498	366	10·48	14·24
Chittagong	17,459	3,480,136	199	7·03	5·21
Patna	23,732	13,122,743	553	9·52	19·63
Bhaugulpore	18,685	6,613,358	354	7·56	9·89
Orissa	23,901	4,317,999	181	9·63	6·45
Chota Nagpore	43,901	3,825,571	87	17·69	5·72
Assam	35,650	1,682,692	47	14·36	2·52

NOTE.—In order to reconcile the areas given in the two previous tables with the sum of those shown in the district tables, it must be explained that the areas in the former tables include 17,399 square miles of waste or uninhabited country which are omitted from the latter. Of these 17,399 square miles, 8,343 represent the hilly portion of Luckimpore in which no census was taken, 5,341 the Sunderbuns, and 3,715 Cachar hills.

The areas of large rivers have generally been excluded throughout the tables.

III.—*Abstract of the Area and Population of each* DISTRICT *in Bengal arranged according to* PROVINCES *and Commissioners'* DIVISIONS.

DIVISION.	District.	Area in square miles.	Number of villages, mouzahs, or townships.	Number of houses.	Total population.	AVERAGES CALCULATED FROM PRECEDING COLUMNS. Persons per square mile.	Villages, mouzahs, or townships per square mile.	Persons per village, mouzah, or township.	Houses per square mile.	Persons per house.
BENGAL.										
Western Districts.										
BURDWAN ...	Burdwan ...	3,523	5,191	435,416	2,034,745	578	1·47	392	124	4·7
	Bancoorah ...	1,346	2,028	104,687	526,772	391	1·57	260	78	5·0
	Beerbhoom ...	1,344	2,471	159,940	695,921	518	1·84	282	119	4·3
	Midnapore ...	5,082	12,962	446,045	2,540,963	500	2·55	196	88	5·7
	Hooghly with Howrah ...	1,424	3,190	322,703	1,488,556	1,045	2·24	467	227	4·6
	Total ...	12,719	25,842	1,468,791	7,286,957	573	2·03	282	115	5·0
Central Districts.										
PRESIDENCY...	24-Pergunnahs	2,788	4,980	393,737	2,210,047	793	1·78	443	141	5·6
	Calcutta ...	8	1	38,864	447,601	55,950	·12	447,601	4,858	11·0
		2,796	4,981	432,601	2,657,648	950	1·78	534	155	6·1
	Nuddea ...	3,421	3,691	352,017	1,812,795	530	1·08	491	103	5·2
	Jessore ...	3,658	4,247	313,660	2,075,021	567	1·16	489	86	6·6
	Total ...	9,875	12,919	1,098,278	6,545,464	663	1·31	507	111	6·0
RAJSHAHYE...	Moorshedabad	2,578	3,753	303,561	1,353,626	525	1·46	361	118	4·5
	Dinagepore ...	4,126	7,108	264,526	1,501,924	364	1·72	211	64	5·7
	Maldah ...	1,813	2,100	129,579	676,426	373	1·16	322	71	5·2
	Rajshahye ...	2,234	4,228	246,371	1,310,729	587	1·89	310	110	5·3
	Rungpore ...	3,476	4,206	331,079	2,149,972	619	1·21	511	95	6·5
	Bogra ...	1,501	2,666	127,099	689,467	459	1·78	259	85	5·5
	Pubna ...	1,966	2,792	198,220	1,211,594	616	1·42	434	101	6·1
	Total ...	17,694	26,853	1,600,435	8,893,738	503	1·52	331	90	5·6
COOCH BEHAR.	Darjeeling ...	1,234	.....	18,864	94,712	77	.....	.....	15	5·0
	Julpigoree ...	2,906	.....	69,648	418,665	144	.....	.....	24	6·0
	Cooch Behar...	1,307	.....	81,820	532,565	407	.....	.....	63	6·5
	Total ...	5,447	.....	170,332	1,045,942	192	.....	.....	31	6·1
Eastern Districts.										
DACCA ...	Dacca ...	2,897	5,016	290,593	1,852,993	640	1·73	369	100	6·4
	Furreedpore ...	1,496	2,307	157,518	1,012,589	677	1·54	439	105	6·4
	Backergunge ...	4,935	4,269	321,657	2,377,433	482	·87	557	65	7·4
	Mymensing ...	6,293	7,601	808,008	2,349,917	373	1·21	309	49	7·6
	Sylhet ...	5,383	5,589	286,594	1,719,539	319	1·04	308	53	6·0
	Cachar ...	1,285	389	37,311	205,027	160	·3	527	29	5·5
	Total ...	22,289	25,171	1,401,681	9,517,498	427	1·13	378	63	6·8
CHITTAGONG ...	Chittagong ...	2,498	1,062	197,104	1,127,402	451	·43	1,062	79	5·7
	Noakhally ...	1,557	2,054	142,155	713,934	459	1·31	351	91	5·0
	Tipperah ...	2,655	6,156	307,011	1,533,931	578	2·32	249	116	5·0
	Chittagong Hill Tracts ...	6,832	.....	13,354	69,607	10	.....	.....	2	5·2
	Hill Tipperah.	3,807	.....	6,329	35,262	9	.....	.....	2	5·6
	Total ...	17,459	.....	665,953	3,480,136	199	.....	.....	38	5·2
	Total for Bengal*	85,483	.....	6,405,470	36,769,735	430	.....	.....	75	5·7

* See note on last page.

III.—*Abstract of the Area and Population of each* DISTRICT *in Bengal arranged according to* PROVINCES *and Commissioners'* DIVISIONS.—(Continued.)

DIVISION.	District.	Area in square miles.	Number of villages, mouzahs, or townships.	Number of houses.	Total population.	AVERAGES CALCULATED FROM PRECEDING COLUMNS. Persons per square mile.	Villages, mouzahs, or townships per square mile.	Persons per village, mouzahs or township.	Houses per square mile.	Persons per house.
BEHAR.										
PATNA ...	Patna	2,101	3,412	269,814	1,559,638	742	1·62	457	128	5·8
	Gya ...	4,718	6,530	327,845	1,949,750	413	1·38	299	69	5·9
	Shahabad ...	4,385	5,110	275,041	1,723,974	393	1·16	337	63	6·3
	Tirhoot ...	6,343	7,337	642,087	4,384,706	691	1·16	598	101	6·8
	Sarun	2,654	4,350	293,524	2,063,860	778	1·64	474	111	7·0
	Chumparun .	3,531	2,299	242,228	1,449,815	408	·65	627	69	5·9
	Total .	23,732	29,038	2,050,539	13,122,743	553	1·22	452	86	6·4
BHAUGULPORE	Monghyr .	3,913	2,457	328,174	1,812,986	463	·63	738	84	5·5
	Bhaugulpore..	4,327	2,789	320,372	1,826,290	422	·63	667	76	5·5
	Purneah	4,057	4,179	313,447	1,714,795	340	·84	410	63	5·5
	Sonthal Pergunnahs ...	5,488	9,872	230,504	1,259,287	229	1·80	128	42	5·4
	Total ...	18,685	19,247	1,201,497	6,613,358	354	1·03	344	64	5·5
	Total for Behar	42,417	48,285	3,252,036	19,736,101	465	1·14	409	77	6·1
ORISSA.										
ORISSA ...	Cuttack ...	3,178	5,500	281,430	1,494,784	470	1·73	271	88	5·3
	Pooree ...	2,473	3,175	143,920	769,674	311	1·28	242	58	5·3
	Balasore ...	2,066	3,266	138,913	770,232	373	1·58	236	67	5·5
	Tributary Mehals ..	16,184	10,178	253,284	1,283,309	79	·62	126	16	5·1
	Total for Orissa	23,901	22,119	817,547	4,317,999	180	·92	195	34	5·2
CHOTA NAGPORE.										
CHOTA NAGPORE	Hazareebaugh	7,021	6,703	150,493	771,875	110	·95	115	21	5·1
	Lohardugga .	12,044	6,486	240,843	1,237,123	103	·54	191	20	5·1
	Singhbhoom ...	4,503	3,208	84,416	415,023	92	·71	129	19	4·9
	Manbhoom ..	4,914	6,308	195,665	995,570	203	1·30	156	40	5·1
	Tributary Mehals ...	15,419	3,001	80,870	405,980	26	·19	135	5	5·0
	Total for Chota Nagpore ..	43,901	25,706	752,287	3,825,571	87	·59	148	17	5·1
ASSAM.										
COOCH BEHAR ...	Goalpara ...	4,433	.....	72,655	444,761	100	...	...	16	6·1
ASSAM ...	Kamroop ...	3,631	1,649	103,908	561,681	155	·45	341	29	5·4
	Durrung ...	3,413	137	43,558	236,009	69	·04	1,723	13	5·4
	Nowgong ...	3,648	1,293	44,050	256,390	70	·35	198	12	5·8
	Seebsaugor ...	2,413	203	55,604	296,589	123	·08	1,461	23	5·3
	Luckimpore ...	3,145	125	26,398	121,267	39	·04	970	8	4·6
	Naga Hills ..	4,000	.....	.....	68,918	...	...	...	...	...
	Khasi and Jynteah Hills	6,157	.....	.....	141,838	.....	.....	.....	.....	...
COOCH BEHAR	Garo Hills ...	3,390	... ..	.....	80,000	.....	.....	.....	.....	...
	Total for Assam* ..	35,130	.....	.....	2,207,453	63	.....	.....	.....	...

* See note on page 438.